



**Walden University**  
**ScholarWorks**

---

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies  
Collection

---

2016

# Executive Banking Leaders and Risk-Management Strategies on Subprime Mortgage Lending

Sam Elbarouki  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Business Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Sam Elbarouki

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Kevin Davies, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Matthew Gonzalez, Committee Member, Doctor of Business Administration Faculty

Dr. Roger Mayer, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2016

Abstract

Executive Banking Leaders and Risk-Management Strategies on Subprime Mortgage

Lending

by

Sam Elbarouki

MA, California State University, Long Beach, 2005

BA, California State University, Long Beach, 2003

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

April 2016

## Abstract

During 2000–2008, subprime mortgage loans were a profitable and popular commodity for banks and lenders alike. The majority of banks that offered this type of mortgage eventually suffered grave financial consequences, largely due to the lack of risk-mitigating processes within their mortgage portfolio. Guided by the stewardship theory, the purpose of this qualitative multiple case study was to explore the risk-mitigation protocols that 4 bank CEOs employed in Northern California used to mitigate the offering of this risky product. Semistructured interviews were used to elicit detailed narratives from these purposively selected bank CEOs on their experiences in risk mitigation. A review of company documents, core value policies, and member checking of initial interview transcripts aided in the overall reliability and validity of the final interpretations. After using Robert Yin's five steps of data analysis, six themes were derived from the final interpretations: risk management as a culture; leaders making prudent, calculated risks on their mortgage lending platform; risk committees set in place to oversee risk strategies; a fiduciary responsibility to grow responsibly; consistent guardrails implemented within the loan portfolio; and leaders using discipline, execution, and correct judgment. By implementing these risk-mitigation strategies, these specific banks were able to survive the mortgage recession with very little financial repercussion. These findings may influence social change by uncovering risk-mitigation strategies in an effort to alleviate this risky product being offered to consumers.

Executive Banking Leaders and Risk-Management Strategies on Subprime Mortgage

Lending

by

Sam Elbarouki

MA, California State University, Long Beach, 2005

BA, California State University, Long Beach, 2003

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

May 2016

## Acknowledgments

The completion of this doctoral study would not be possible without the support of several very important people. I would first like to thank my father, Foazi Elbarouki, who initially inspired me to start this doctoral journey. As the first immigrant to the U.S in the early 70s out of our entire family, his dedication to complete his Ph.D., while supporting many members of his family and working 3 jobs was unprecedented and truly motivating. He is a pioneer of our globally large family and a true testament of diligence, nobility, and benevolence. I would like to acknowledge my mother, Gufran Elbarouki, who came to this country with no formal collegiate education, and worked hard to obtain her A.A degree, while raising 3 active boys and working full-time for 32 successful years.

Special acknowledgment goes to my beautiful wife, Hind Obied, who not only supported me wholeheartedly throughout the entire doctoral study but also endured my time away from the family while going through this challenging endeavor. A tremendous amount of sacrifice is necessary to accomplish a terminal degree, and my wife was on the front lines of this endeavor- thank you and I love you! I would be remiss if I did not acknowledge my amazing committee, Dr. Kevin Davies, who helped put me back on track for graduation. Dr. Matthew Gonzalez, who was very timely and always provided valuable feedback, and Dr. Roger Mayer and Dr. Gene Fusch, for believing and advocating in my study.

## Table of Contents

List of Tables .....	v
Section 1: Foundation of the Study.....	1
Background of the Problem .....	1
Problem Statement.....	2
Purpose Statement.....	3
Nature of the Study .....	3
Research Question .....	5
Interview Questions .....	5
Conceptual Framework.....	6
Operational Definitions.....	7
Assumptions, Limitations, and Delimitations.....	9
Assumptions.....	9
Limitations .....	9
Delimitations.....	10
Significance of the Study .....	10
Contribution to Business Practice.....	10
Implications for Social Change.....	11
A Review of the Professional and Academic Literature.....	12
Stewardship Theory .....	13
More Theories Related to the Topic and Opponents of Stewardship Theory.....	14
Background.....	17

History.....	19
Different Types of Subprime Loans .....	24
The Process of Subprime Lending.....	26
Predatory Lending.....	28
Mortgage Fraud.....	32
CEO and Leadership Behavior .....	36
Risk-Management Strategies and Inefficiencies of Subprime Loan	
Portfolios.....	37
Illusive Victims.....	40
Fannie Mae.....	41
Freddie Mac .....	41
The Federal Housing Administration (FHA) and U.S. Department of	
Housing and Urban Development (HUD) .....	42
Foreclosures .....	43
Housing and Economic Recovery Act.....	45
The Consumer Financial Protection Bureau (CFPB) and Qualified	
Mortgage (QM) Rule .....	45
Enterprise Risk Management (ERM).....	47
Transition and Summary.....	49
Section 2: The Project.....	50
Purpose Statement.....	50
Role of the Researcher .....	50



Participants.....	51
Research Method and Design .....	53
Method .....	54
Research Design.....	54
Population and Sampling .....	56
Ethical Research.....	56
Data Collection Instruments .....	58
Data Collection Technique .....	59
Data Organization Techniques.....	61
Data Analysis .....	61
Reliability and Validity .....	62
Reliability.....	62
Validity .....	63
Transition and Summary.....	64
Section 3: Application to Professional Practice and Implications for Change .....	65
Introduction.....	65
Presentation of the Findings.....	66
Emergent Themes .....	66
Findings by Interview Question.....	67
Applications to Professional Practice .....	77
Implications for Social Change.....	79
Recommendations for Action .....	80

Recommendations for Further Research.....	81
Reflections .....	81
Summary and Study Conclusions .....	82
References .....	84
Appendix: Certificate of Completion.....	101

## List of Tables

Table 1. Frequency of Themes: Risk-Management Tools the Four Bank Leaders Used.....	68
Table 2. Frequency of Themes: Risk Foundational Layout.....	70
Table 3. Frequency of Themes: Risk Culture in the Organization .....	71
Table 4. Frequency of Themes: Risk Exposure and Management .....	72
Table 5. Frequency of Themes: Risk-Management Training .....	73
Table 6. Frequency of Themes: Employee Incentives.....	74
Table 7. Frequency of Themes: Policies on Subprime Mortgage Lending 2000–2008 ...	75
Table 8. Frequency of Themes: Stewardship.....	76

## Section 1: Foundation of the Study

*Subprime lending* is a business term used to describe loans with reduced lending requirements and underwriting conditions and terms (U.S. Department of Housing and Urban Development [HUD], 2012). A subprime mortgage loan is a loan granted to mortgagors who do not qualify for market interest rates owing to various risk factors, such as income level, size of the down payment made, credit history, and employment status (Shiller, 2012). Subprime mortgage loans were found to be a root cause of mortgage and economic crisis experienced in the United States during 2008–2011 (Immergluck, 2011). The majority of mortgage lenders offered subprime loans as a choice for homeowners who were credit challenged (Immergluck, 2011). Up to 80% of the financial institutions offered subprime mortgages to consumers at one point during the subprime mortgage rush (Fannie Mae, 2013).

### **Background of the Problem**

Two perceived consumer benefits for creating subprime loans were to increase the number of homeowners across the United States and the opportunity for homeowners to create wealth (Kroszner & Strahan, 2013). Subprime loans quickly became high-cost lending products, which had a higher probability of consumer default (Kroszner & Strahan, 2013). Adversely, these subprime mortgages were extremely profitable for the banking institution that offered them. Since most of the subprime mortgages consisted of shorter terms, many lenders and senior financial leaders were willing to be exposed to such a risk over shorter horizons (Bhardwaj & Sengupta, 2012). Subprime mortgages had

higher interest rates and fees charged to the borrower, and thus much higher profit margins existed (Kroszner & Strahan, 2013).

Loan risk management for banks often has been described as a highly abstract, analytical activity, which relies heavily on statistics and financial economics (Weber, 2012). During the subprime mortgage crisis, the majority of banks were exposed to far more loan risk than ever before (Ellul & Yerramilli, 2013). Ellul and Yerramilli (2013) posited that failure of risk-management strategies contributed to exposing banks to loan risk. The financial crisis of 2007–2009 led regulators and industry observers to call for firms to have executives exclusively devoted to loan risk oversight, particularly since it emerged that one of the victims of the subprime credit debacle, Citigroup, had ineffective risk oversight and another, Merrill Lynch, had no chief risk officer (CRO; An, Deng, Rosenblatt, & Yao, 2012).

Not every bank was exposed to riskier loan portfolios. Loan risk-management strategies have been applicable in the banking sector since its infancy. However, some banks have more effective or conservative lending risk-management efforts than their competitors, whereas other banks allowed more loan risk exposure due to negligence, oversight, or lack of knowledge (Weber, 2012).

### **Problem Statement**

Between 2000 and 2008, exponential numbers (over 3 million household mortgage holders) were derived of subprime mortgages and in default partly due to poor banking risk-management strategies and processes (Lewellyn & Muller-Kahle, 2012). Kroszner and Strahan (2013) noted loose risk-management regulations as one reason that

over 42% of defaulted loans in the United States as of June 30, 2012, were subprime mortgages. The general business problem is that actions such as ignoring risk-management protocols by financial leaders during the subprime mortgage period were not always consistent with the benefits of the shareholders or fundamental values of the firm (Chang & Chen, 2013). The specific business problem is that some banking leaders lack effective risk-management strategies and policies to help mitigate the risk of mortgage default.

### **Purpose Statement**

The purpose of this qualitative multiple-case study was to explore risk-management strategies and policies of those bank leaders who effectively mitigated subprime mortgage loan defaults during the financial crisis. The population for the study was executive financial leaders who effectively mitigated the risk of subprime mortgage defaults with little or no financial effect on their organization. Results from this study will provide information to banks regarding effective mortgage-lending practices. This study will contribute to social change by creating awareness to both consumer and bank leaders on loan risk assessment. By creating social awareness about bank loan risk assessments, more informed decision making from consumers may result in relation to their mortgage borrowing needs.

### **Nature of the Study**

In this study, I used a qualitative multiple-case study method to explore the strategies of a specific group of participants (R. K. Yin, 2014). The nature of this study aligned with qualitative research methods more so than quantitative methods due to the

exploratory nature of the topic. A quantitative or mixed-method study involves closed-ended questions and statistical data, whereas the qualitative method is comprehensive and can be unstructured (R. K. Yin, 2014). The qualitative method allows for open-ended questioning, which was an integral aspect in collecting data for this study to ensure participants described the phenomenon being studied in detail. The quantitative method does not support open-ended questions for exploration. Quantitative researchers often conduct studies centered on yes-or-no questions that test hypotheses; therefore, the quantitative method was not considered appropriate for this research (Venkatesh, Brown, & Bala, 2013).

A qualitative multicase study was elected because the purpose of the study was to explore a select niche of participants—case studies tend to thoroughly document one or two cases (Marshall & Rossman, 2011; R. K. Yin, 2012). The explanatory case study approach by design allows the researcher to ask *how* and *what* questions in the study (R. K. Yin, 2014). These specific questions were integral for this study in order to capture the most accurate and honest data. There are several qualitative research designs, most notably, phenomenology, ethnography, and case study (Marshall & Rossman, 2011). Ethnography is a systematic study of people and cultures designed for the researcher to observe from the point of view of the subject being studied (Somasundaram & Sivayokan, 2013). This multicase study did not suit an ethnography design as neither people nor cultures were studied. Case studies are able to identify issues that illustrate deficiencies and system failures, whereas phenomenological studies look more at single cases (R. K. Yin, 2014). Moreover, a phenomenological study aims to understand the

experience of a particular phenomenon through more humanistic aspects such as emotional decision making (Merriam, 2014). Case study was the optimal choice over both phenomenological and ethnography.

### **Research Question**

One central research question guided the study: What risk-management strategies are employed by financial leaders of successful firms to mitigate subprime mortgage default? Interview questions were devised to answer the research question.

### **Interview Questions**

The following interview questions aided in gathering data to answer the research question:

1. What, if any, risk-management tools are used at your bank? Tools such as Value at Risk, Monte Carlo simulations, (cash flow at risk), stress testing, and so on.
2. Do branch managers have decision-making authority on their business practices? Please explain in detail why or why not.
  - (a) Please describe the foundational layout of the department or persons in charge of risk.
3. How would you describe the importance of the risk culture within your organization?
  - (a) What is the messaging around it?
4. How does your organization assess risk exposure?
  - (a) What are the costs and benefits of managing risk?



5. Why, if any, risk-management training is offered to employees?
6. Why, if any, employee incentives and performance metrics are used to reinforce sound risk-management practices?
7. What policies and practices regarding subprime mortgage lending did your institution follow during the years of 2000–2008?
8. Describe what it means to be a good steward of your institution.
9. Would you like to add any additional information to help me better understand the role risk management plays in your organization?

### **Conceptual Framework**

The conceptual framework serves as an outline and possible course of action to present a wide range of ideas or thoughts (Pike & Chui, 2012). A conceptual framework can be the foundation and paradigm to establish goals and aspiration of the research (Pike & Chui, 2012). The conceptual framework in qualitative research can establish areas of importance and may also explain the *why* and *how* in a study (Pike & Chui, 2012). My focus in this qualitative research study was to explore lending risk-management strategies employed by bank leaders during the subprime mortgage-loan era. Stewardship theory relates well with the overall emphasis of this study.

Stewardship theory was first introduced by Donaldson in 1991. The basic definition of stewardship theory is that when managers are left on their own, they will act as responsible stewards of the asset they control (Hernandez, 2012). The theory's roots are from psychology and sociology (Hernandez, 2012). There is an interesting dichotomy between the leadership context of stewardship and the governance system it broadly

ascertains. A steward of the organization is one who demonstrates a commitment to the best interests of the organization, shareholders, and stakeholders (Van Puyvelde, Caers, Du Bois, & Jegers, 2012). In a leadership context, the notion of stewardship is a deep commitment to uphold the fiduciary obligations to institutional interests, as well as the nonfiduciary, but still moral obligation to other stakeholders affected by organizational actions (Hiebl, 2012). The theory advocates alignment between upper management through not creating a division of responsibilities between chairmen and the CEO.

In the case of this qualitative multiple-case study, the unit of analysis is the financial institution that offers different lending instruments. Risk managers, CEOs, and other executive leaders have the responsibility to be stewards and perform for their respective organizations. Those organizations that did not have a subprime mortgage implosion might have followed true to the stewardship theory in both the corporate governance and leadership contexts. Conversely, those institutions that imploded during the subprime crises might have had leaders who veered away from the stewardship model in an effort to self-benefit and gain.

### **Operational Definitions**

*Ability to repay:* This part of the Dodd-Frank Act implemented on January 10, 2014, mandated that creditors make reasonable and good faith loans to consumers who have the ability to repay the loan (Consumer Financial Protection Bureau [CFPB], 2014).

*Balloon loans:* A balloon loan is a mortgage that begins with low interest rates for a specified length of time (usually between 5 and 10 years). After the initial period

lapses, the entire mortgage balance becomes payable, or the borrower can refinance for new loan terms (HUD, 2012).

*Collateralized debt obligation:* This is an asset-backed security backed by receivables on loans, bonds, and other debt (HUD, 2012).

*Implosion:* In mortgage terms, implosion is the act of a mortgage company or entity imploding from the inside out due to mortgage portfolio default (HUD, 2012).

*Mortgage-backed security:* Mortgage-backed securities are derivatives whose value derives from unpaid mortgages (HUD, 2012).

*Negative amortization:* Negative amortization occurs when scheduled mortgage payments received are not enough to umbrella both the principal and interest on the mortgage (HUD, 2012).

*Predatory lending:* Predatory lending refers to lending customs that include accommodating a mortgage loan to borrowers who are incapable of paying the loan back. Predatory lending also applies to habitual refinancing of a loan with new fees and elevated interest rates (HUD, 2012).

*Qualified mortgage (QM):* The Dodd-Frank Act created the QM rule on presumption that the creditor making the loan satisfies the ability-to-repay requirements (CFPB, 2014).

*Real Estate Settlement Procedures Act:* The Real Estate Settlement Procedures Act law protects consumers from abuses during the residential real estate purchase and loan process by requiring lenders to disclose all settlement costs, practices, and relationships (HUD, 2012).

### **Assumptions, Limitations, and Delimitations**

The following sections include assumptions, limitations, and delimitations for this study. Conducting research inherently has flaws. The following subsections will outline the boundaries set, notated potential weaknesses, and research assumptions made in this study.

#### **Assumptions**

Assumptions in a study are items that are out of the researcher's control, but if they disappear, the study becomes irrelevant (Myers, 2013). Braun and Clarke (2013) added that assumptions of the study are so basic that without them, the research problem itself could not exist. Assumptions also can be something learned in which one may believe strongly, and those beliefs become part of one's personal beliefs. A central assumption in conducting this qualitative case study was that all participants interviewed would be forthcoming and honest when answering the exploratory questions. Another assumption was that this study would provide information for other executive financial leaders on strategies to limit or avoid certain high-risk products.

#### **Limitations**

Limitations are inherent weaknesses in the study and are out of the researcher's control (Greene et al., 2013). One limitation in this study was that some participants might only give me several minutes to conduct the interview, considering they are a CEO or similar authority within their organization—their time is limited. Therefore, having succinct and methodical interview questions was critical in ensuring ample data were derived within the time allotted (Myers, 2013). Another limitation can be the data

instrument itself. Since I was the instrument, there was a propensity of error occurring in capturing consistent and accurate data 100% of the time. Data in this study came from face-to-face interviews and were limited to a small group of participants in the banking sector.

### **Delimitations**

Delimitations serve to narrow the scope of a study on what a researcher might not include in the study and define the boundaries of the study (Moustakas, 1994). Only executive-level financial leaders were participants during the course of this study. Participants who were in senior leadership roles during the subprime mortgage era and made executive decisions to limit or not lend out subprime mortgages to consumers were the basis for this study. There were a small number of lenders and banks that did lend out subprime mortgage loans and withstood the mortgage crisis (Immergluck, 2011). The geography was narrowed to banks in Northern California. The four organizations being looked at met these criteria and were successful during a pivotal financial crisis.

### **Significance of the Study**

Contribution to business practice and implications for social change are two critical components of a qualitative study. Neither component is more important than the other, but both should be applicable in the study. These two elements are described in detail in the following subsections.

#### **Contribution to Business Practice**

Business implications exist when looking at those financial institutions that offered subprime mortgages and did not assess the inherent risks that come with this

offering (Christie, 2013). The vast majority of banks and lenders that offered subprime mortgages were financially affected, as risk-management strategies were merely in place. Many of the banks eventually filed for bankruptcy (Christie, 2013). The few banks that limited or never offered subprime loans found a way to limit their lending risk exposure, creating a higher propensity to survive the economic recession without being acquired by another bank or filing for bankruptcy (Dell'Ariccia, Igan, & Laeven, 2012).

### **Implications for Social Change**

The implications for positive social change include the potential to provide pertinent information to future homeowners seeking a mortgage. When potential borrowers are looking for the right mortgage, they may want to consider the organizational lending offering before making a decision (Lugo, 2014). If a bank does offer subprime mortgages, it is in the best interest of the consumer to seek professional advice before committing to that bank or lender (Chang & Chen, 2013). The output of this research could provide useful data to mortgage lenders, bankers, and regulatory entities on the possible deception and dishonesty presented during the subprime mortgage-loan era. Subprime mortgage information is essential for those purchasing or refinancing a home in the United States.

Positive social change may occur if educating and informing borrowers leads to fewer individuals defaulting on their home loan or eventually foreclosing. There is a high correlation between borrowers who had a subprime mortgage loan and the propensity of foreclosing (Immergluck, 2013). Foreclosing on a house can have profound social effects on homeowners. Financial hardship, credit challenges, and embarrassment stemming

from a foreclosure can lead to negative social consequences for a homeowner. Fewer subprime mortgages should equate to fewer foreclosures and financial hardships, which are critical benefits to society.

### **A Review of the Professional and Academic Literature**

The focus of the literature review was to gain a deeper understanding of the primary research question relating to banking risk-mitigation tactics. The exploration into the background of this study topic includes research from peer-reviewed journal articles and statistical figures from governmental sources. Primary research articles were from research repositories such as ProQuest, Emerald, Business Source Complete, ABI/Inform Complete, Academic Premier, Sage Premier, and Google Scholar. The total number of all references used in each specific category was six books, 95 journals and articles, five dissertations, four government and corporate reports, and one website. The literature review search focused on articles less than 5 years old and used terms such as *subprime mortgages*, *bank risk mitigation*, and *mortgage crisis*. There is a plethora of peer-reviewed or governmental articles on the topic, verified statistics on subprime mortgages, and risk-management protocols. Empirical data on this subject are also available. Of the 111 total references used, 97 (87%) were published in the last 5 years, and 99 (89%) of the references were peer reviewed. Several themes emerged from the research conducted on the plausible theories associated with this study topic. Inefficient or nonexistent risk-mitigation protocols, CEO greed, internal communication disconnects between senior leadership, fraud, and negligence were common themes discovered within the context of the research.

## **Stewardship Theory**

One description of stewardship theory is that when senior managers are left on their own, they will act as responsible stewards of the assets they control. Hiebl (2012) stated that stewardship is a deep commitment to uphold the fiduciary obligations of the institutional interests. One of the objectives of this qualitative multiple-case study was to assess those organizations being studied and whether or not stewardship behavior was observed. The beneficiaries of stewardship behavior can include the owners of the organization, the associates, and the outside community. Past research on stewardship and agency theory showed these two theories can be interchangeable or complementary. A study done by Van Puyvelde et al. (2012) did not separate the two theories but instead used them in complementary fashion when looking at the principle–agent relationship within nonprofit organizations. Extended principle–agent theory needs not only to take into account standard agency situations that assume goal conflict but also to focus on limit situations where agents share the same interests as the principle, in line with the stewardship perspective within the organization (Van Puyvelde et al., 2012).

In order to understand stewardship, it is critical to first analyze the concept of covenantal stewardship. Stewardship theorists have advocated that individuals hold a covenantal relationship with their organization, which represents moral commitment and creates a common goal without taking advantage of one another (Caldwell & Karri, 2005). This covenantal relationship can foster a sense of mutual obligation to perform and execute the core values and principles in place. The covenantal relationship is a reciprocal promise-based agreement, containing both transactional and psychological



elements: Individuals recognize their fiduciary obligations to protect the interests of stakeholders and believe they are morally obliged to pursue these interests (Caldwell & Karri, 2005). Because individuals need not hold a position of power or authority to have a covenantal relationship with the organization, stewardship behavior can be exerted across all levels of the organization (Hernandez, 2012). Moreover, since stewards of the organization generally have a sense of obligation or duty to others, a covenantal relationship is exemplified.

Stewardship theory can draw from an alternate view from agency theory, in which organizational actors see greater long-term utility in the other focused, prosocial behavior rather than in self-serving, short-term opportunistic behavior (Hernandez, 2012). Within this paradigm, organizations that promote relationship-centered collaboration generally adopt trustworthy behavior in their managers (Hernandez, 2012). Stewardship entails placing the long-term interest of the group ahead of personal goals that serve an individual's self-interests (Hernandez, 2012). CEOs and executives can display stewardship behaviors by placing the organization's interest above their own and acting in the best interest of the principles (Van Puyvelde et al., 2012). Much of the research conducted in this literature review helped ascertain whether executive leaders in the banking sector during the subprime mortgage era acted as stewards to their organization or not.

### **More Theories Related to the Topic and Opponents of Stewardship Theory**

The focus of this qualitative multiple-case study was to explore lending risk-management strategies by certain bank leaders who avoided subprime mortgage

implosion. Several theories and frameworks relate to the conceptual framework of this research topic. A qualitative ethnography study conducted by Patterson and Koller (2011) depicted the growth in subprime lending and its systematic fraud. Patterson and Koller used the diffusion of innovations theory established by Rogers in 1962 to show how opportunities diffuse throughout a business system. A total of 22 participants out of the original 64 contributed to the work of study. The research showed that diffusion of innovations theory provides a framework for explaining how occupational crime in the subprime mortgage industry can occur through innovation or reinvention (Patterson & Koller, 2011). Furthermore, the diffusion of innovation theory compensates for how motivation and opportunity are the most critical components of white-collar crime within the subprime mortgage industry (Patterson & Koller, 2011).

A study concluded by Pezzuto (2012) attempted to demonstrate that the subprime mortgage crisis could have been addressed and managed earlier by many of the stakeholders involved. Pezzuto argued that poor risk-mitigation efforts, fraudulent rating agencies, and lack of corporate social responsibility ultimately led to demise of the economy. Pezzuto associated the neoclassical price theory, originally introduced by Veblen in 1900, as a way to justify the rationale of the masses of the bank leaders. Neoclassical price theory focuses on the determination of prices, outputs, and income distributions in the markets through supply and demand (Pezzuto, 2012).

Another qualitative case study, by Vinokurova (2012), looked at analogical reasoning within cognitive frames in relation to the evolution of the mortgage-backed securities market. The researcher did an historical analysis to build a narrative of the

development of mortgage-backed securities from 1968–2008. Twenty-one unstructured interviews were conducted on former industry participants (Vinokurova, 2012).

Vinokurova set out to examine the proposition that analogical blindness can lead decision makers to disregard new information about their environment. Based on the researcher's results, this proposition holds true. The decision making that ultimately culminated in the 2008 mortgage crisis offers an interesting look at when cognitive frames outlive their usefulness (Vinokurova, 2012).

A two-part detailed study was conducted by Paul, Stein, and Uhde (2012) on German banks assessing risk-mitigation efforts in 2006 prior to the mortgage crisis and again in 2010. Thirty-four banks participated in both surveys. The overall goal of the study was to assess the perception of bank leaders on supervisory quality and risk-mitigation instruments prior to and following the mortgage crisis. The results showed leaders becoming more skeptical toward the aspect of banking supervision, regulations, and risk tools. The evidence showed that German bank leaders perceived more detailed qualitative regulations on internal risk-management systems and the management liquidity risks as less helpful compared to findings from the earlier study in 2006 (Paul et al., 2012).

A quantitative study by Mang'anyi (2011) looked at banks in Kenya and their corporate governance structure and compared it to bank performance. Stratified sampling was employed of select banks; a total of 40 bank managers participated in the study. Mang'anyi administered a semistructured questionnaire using both closed-ended and open-ended questions. One-way analysis of variance was used to test the hypothesis.

Mang'anyi used both agency theory and stewardship theory in the study. Agency theory, introduced by both Ross and Minick in the early 1960s, proposes that in modern corporations, managerial actions depart from those required to maximize shareholder returns (Mang'anyi, 2011). Stewardship theory, developed by Donaldson in 1991, offers an alternative to agency theory. Stewardship theory suggests that when a convergence of values exists between principals and agents, or when organizations promote unselfish values, responsible behavior results by internal means (Segal & Lehrer, 2012). The result of Mang'anyi's study showed that 60% of the respondents agreed that the bank had good improvement with corporate governance. All three null hypotheses showed no significant differences between bank ownership and financial performance.

### **Background**

The subprime mortgage industry has been consistently growing in recent years, and subprime mortgage loans found in suburban markets such as Riverside, California, have increased significantly (Immergluck, 2011). In cities where increased housing appreciation was present, underwriters wrote a higher percentage of subprime loans, including less lenient underwriting guidelines applicable to those homeowners (Goetzmann, Peng, & Yen, 2012). Higher subprime delinquency rates and resultant foreclosures caused a substantial loss to hundreds of financial firms, eventually leading to the economic recession (Guangdi & Fulwood, 2013).

Subprime loan defaults also increased substantially from 2004–2010 (Liu, Ma, & Zhang, 2012). On a national level, subprime foreclosures in 2007 overwhelmed the media with subprime mortgage related stories; at the time, 1 in 5 subprime loans was past due

on monthly payments, demonstrating an increased number of delinquencies on subprime mortgage payments (Immergluck, 2011). The U.S. financial crisis was in large part caused by subprime mortgage foreclosures that occurred when borrowers in large core areas were unprepared to pay for the homes they purchased (Immergluck, 2011).

Subprime mortgages became a topic of discussion at the start of the economic recession in 2007 in the United States (Liu et al., 2012). The direction and focus of many banks during the era prior to the mortgage crisis were misguided (Liu et al., 2012). According to Liu et al. (2012), the mortgage crisis caused a significant disruption in the U.S. financial industry. When borrowers consider a mortgage loan, helpful information such as credit and financial requirements necessary for approval of a subprime loan can assist the borrowers in making informed decisions. Unfortunately, mortgage bankers and lenders took advantage of uneducated mortgage borrowers, in effect placing them into high-risk loans such as a subprime mortgage with a low propensity of being able to pay back the loan.

There are several stages of a mortgage default. The loan (a) is paid off (via regular sale, refinancing, short sale, or deed in lieu of foreclosure), (b) is cured (becomes current either through loan modifications or the borrower's own efforts), (c) is partially cured (becomes less than 90 days delinquent either through a repayment plan or the borrower's own efforts), (d) is initiated into foreclosure proceedings, or (e) remains in default (Voicu, Jacob, Rengart, & Fang, 2012). Kroszner and Strahan (2013) verified that, in the second quarter of 2012, subprime adjustable rate mortgage (ARM) loans accounted for 19.85% of defaulted loans, whereas subprime fixed loans accounted for 22.60% of

defaulted loans, which together totaled over 42% of all defaulted loans in the nation. Recourse versus nonrecourse states play a vital role in subprime mortgage delinquency rates (Campbell & Cocco, 2015). With a recourse loan, the borrower is personally liable for the debt (Campbell & Cocco, 2015). If a lender operates in a recourse state and the borrower defaults on the loan, the lender has authority to pursue the debtor to recovery the deficiency (Campbell & Cocco, 2015). Conversely, if a borrower exists in a state with a nonrecourse policy, then the lender can only foreclose on the property and may not obtain a deficiency judgment on the borrower (Campbell & Cocco, 2015). Nonrecourse states such as California and Arizona saw an increased number of subprime mortgage defaults eventually leading to foreclosure (Campbell & Cocco, 2015).

A person's Fair Isaac Corporation (FICO) credit score is the predominant criterion for obtaining a home loan (Kroszner & Strahan, 2013). Finance and retail establishments first used credit scores in the 1950s and 1960s, and in the 21st century, using credit scores has become common for most companies who consider giving someone credit (Kroszner & Strahan, 2013). Many credit-monitoring companies are available to the public, allowing individuals to gain a thorough analysis of their credit profile and three credit scores. A mortgage prime loan allows borrowers to obtain lower interest rates, better fixed terms, and usually lower closing costs (Kroszner & Strahan, 2013).

## **History**

The history of subprime mortgage lending dates back to 1977 when the Community Reinvestment Act (CRA) was passed (Dahl, 2010). This policy altered the

way federally chartered banks loaned money in their respective communities, primarily to low-income and ethnic-minority consumers (Casey, Glasberg, & Beeman, 2011; Dahl, 2010). The CRA policy might have forced the banks to implement change to aid individuals who might not qualify for a home loan to qualify. If the banks did not follow suit with the CRA policies, they might have lost out on opportunities, such as mergers, acquisitions, and profitability.

Pressuring banks to make loans to those in underserved areas because of the new guidelines and penalties was common (Casey et al., 2011; Dahl, 2010). Once staff of pressured banks offered risky mortgages to underserved areas, they (and mortgage brokers) found they could make money on them by selling them to *securitizers*, who in turn packaged the mortgages in pools and sold them (Casey et al., 2011). This process suggested that subprime lending seemed like a viable option and that the government persuaded Freddie Mac and Fannie Mae to take on riskier loans so that lower income households could experience homeownership (Casey et al., 2011).

Creating the CRA assisted minorities and individuals from lower income areas to obtain loans from banks due to the neglect and possible bias shown to certain groups (Casey et al., 2011). An empirical study conducted by Casey et al. (2011) looked at race, ethnicity, and CRA activity related to these demographics. Statistical models were imputed for CRA data comprised from all over the United States. Casey et al. associated their study with public choice theory, which was introduced by Wicksell in 1896. The theory examines the use of economic tools and political behavior. The results of the study indicate CRA activity may aid to connect African American applicants to regulated

lenders, however, there may be a cost to white applicants. Just as stewardship theory, public choice theory focuses on behavior, but its emphasis is in the political field. Within the public choice theory, analysis is conducted on voters, politicians, and bureaucrats in order to identify problems or suggest solutions. One can infer that both stewardship theory and public choice theory have a commonality of positive and responsible behavior for the greater good of the organization or group.

There was pressure on mortgage lenders to be socially responsible and lend to all groups, regardless of income level or race. However, this did provide the opportunity to lenders to originate more loans and charge more fees to those borrowers who fit in the category of higher risk to the bank. The CRA might have helped contribute to the proliferation of subprime mortgages, which perpetuated the crisis because bankers felt pressured to produce high-risk mortgages.

Dahl (2010) disagreed with the CRA assisting in the subprime mortgage crisis. Dahl contended that the CRA (a) created innovation, (b) minimized cost of information, (c) encouraged more competitive activity between banks, and (d) produced heavy lending activity to help liquidate the market. Paulet, Parnaudeau, and Relano (2014) agreed with the assessment that government regulatory policies coaxed lenders to participate in predatory lending. Loose lending led to expanding homeownership in the United States, but lending to riskier borrowers led to increased foreclosures (Paulet et al., 2014).

The intent of bank deregulation in the 1980s was to create larger and more diversified banks. Deregulation also gave larger banks the opportunity to loosen underwriting lender guidelines and generate increased opportunity for homeownership



(Kroszner & Strahan, 2013). After deregulation, banks utilized many versions of mortgage loans. Mortgage loans such as subprime and Alternative A paper loans became available for borrowers challenged to find mortgage lenders before deregulation. Subprime mortgages were appropriate for borrowers with substandard credit, and Alternate A paper loans were appropriate for borrowers who had good credit and assets.

Structured securitization was the dominant form of mortgage securitization by the 1990s (Immergluck, 2011). This included collateralized mortgage obligations and derivatives such as collateralized debt obligations. Lenders pooled most of these collateralized mortgage obligations and collateralized debt obligations together into mortgage-backed securities and sold to investors all over the globe (Immergluck, 2011). Within the pool of subprime collateralized debt obligations, there were loans such as stated income, no documentation, and adjustable rates, making the mortgage-backed securities portfolio riskier (Immergluck, 2011). Since subprime loans and prime loans intermixed into a mortgage-backed security, it was more difficult for investors to decipher how risky the portfolio was; moreover, a mortgage-backed security made it easier for risky loans to hide in a group of millions of dollars of other non-subprime loans, thus supporting the subprime lending process (Immergluck, 2011).

A quantitative study by Kau, Keenan, Lyubimov, and Slawson (2012) looked at subprime loans packaged together during the years of 2006 and 2007 and attempted to ascertain whether the lenders involved assessed risk during the origination of each loan. Data were collected from BlackBox Logic, a large neutral data firm that collects information from over 6,000 lenders. Several hypotheses were presented by the

researchers. The data results show the firms that are acquiring mortgage loans on the secondary market should objectively collect more information prior to purchasing the loans (Nieh, Yang, & Kao, 2012). Credit or risk executives within these organizations who ultimately purchased the mortgage-back securities might have shown a lack of stewardship by not focusing on the long-term effects of these mortgage acquisitions, instead looking at the short-term benefits. Stewardship behavior tends to sacrifice short-term gain in order to protect the long-term well-being of the organization (Caldwell & Karri, 2005).

Another innovation in the financial world supporting subprime investment flows was the Credit Default Swap (CDS; Wang & Moore, 2012). A CDS effectively is a private, unregulated insurance agreement allowing investors in mortgage-backed securities to hedge their investments by increasing the amount of capital flowing into such investments (Immergluck, 2011). CDS helped spur the investors to purchase riskier loans by allowing them to hedge a loan with other investments. Pooling these subprime mortgages on the secondary market into mortgage-backed securities was a typical protocol. These mortgage-backed securities were sold off in groups in an effort to swap and transfer credit exposure on these risky loans for the bank (Dieckman & Plank, 2012). CDS delivered two of the largest payouts in the history of financial markets: The Paulson & Company series of funds secured \$12 billion in profits from a single CDS trade in 2007, and Goldman Sachs generated \$6 billion in profits from a single CDS trade in 2007 as well (MacKenzie, 2012).

### **Different Types of Subprime Loans**

The primary benefit to subprime lenders offering ARM loans was ARM loans allowed lenders to increase borrowers' interest rates based on inflation, unlike fixed rate loans in which lenders could not increase borrower interest rates (Paul, 2012). The most commonly known subprime loans include ARM loans, interest-only loans, balloon loans, and variable rate loans. These types of loans typically start with low interest rates, known as teaser rates. When an adjustable rate changes, a homeowner's mortgage payment could increase, sometimes significantly. For example, if a consumer receives a subprime 3/27 (30-year) ARM loan for \$150,000 at 4% to purchase or refinance a home, the "3" in 3/27 indicates a fixed rate on the loan for 3 years. For 3 years, the borrower will make mortgage payments based on the set 4% rate; however, after the 3-year period, the remaining 27 years of the mortgage are adjustable years, which means payments can increase or decrease during that time.

Many borrowers qualified for the low fixed interest rate, resulting in a lower monthly mortgage payment. The issue is many borrowers may not realize the fluctuation in payment once the fixed period is up. Adversely, some lenders may not underwrite the loan based on the anticipated increase in rate and payment, instead qualifying borrowers on the lower fixed rate or payment. ARM loans could attract borrowers because of the initial low payments offered, but ARM loans do adjust. When rates increase, borrowers' monthly payments can increase and cause financial difficulties (Paul, 2012). Qualifying borrowers based on possible increases serves to ensure borrowers are financially able to withstand higher ARM payments. If a lender qualifies a borrower based solely on current

financial status and does not consider future financial abilities, ARM increases could lead to late payments and possible foreclosures. According to Paulet et al. (2014), the weakened underwriting standards of subprime mortgage lenders were a reason many borrowers found it onerous to make their ARM payments. Increased underwriting and credit standards among nonbank mortgage lenders might have reduced the number of subprime ARM loan defaults.

Rates change in adjustable rate loans based on the rise and fall of interest rates and an index normally revealed in the contract. Banks use several rate indexes when lending loans to consumers. These indexes include the London Interbank Offered Rate, Prime Federal Rate, and bond rates. With ARM loans, the interest rate can adjust as often as every 90 days, 6 months, or annually until the loan term ends, which is typically 30 years (Paul, 2012). Adjustable rates increases obligate the borrowers to higher mortgage payments. Conversely, if the adjustable rates decrease, the consumer pays a lower monthly mortgage payment. There is a rate ceiling placed on the loan by the lender. For example, a borrower can have an initial rate of 4.25% and connects to the 6-month London Interbank Offered Rate. Once the fixed-rate time elapses, the loan rate can adjust every 6 months according to the London Interbank Offered Rate index. If a lender has put in place a rate ceiling of 13.0%, that means the rate will stop increasing after 13.0%, having reached its maximum. Inevitably, when an increase in interest rates occurs on ARM home loans, homeowners can experience challenging times.

At the start of the 21st century, the American dream of owning a home was particularly prevalent and desired. However, during the mortgage crisis, which began in

2007, many homeowners in places like Salinas, California, experienced hardships with the dream of homeownership because of their decision-making or lack of understanding of the type of loan obtained (Fannie Mae, 2012). The frequent concurrence of the terms *predatory lending* and *dream* implies that it is not only borrowers and American homeowners who are at risk from predatory lenders; frequently, individuals cited predatory lending with killing the American Dream itself (Realtytrac, 2013). According to Realtytrac (2013), homeowners in California experienced one of the hardest hits in terms of home foreclosures.

### **The Process of Subprime Lending**

The subprime lending process began in the 1980s. The Depository Institutions Deregulation and Monetary Control Act of 1980 helped introduce and create subprime mortgages (Immergluck, 2011). Regulatory entities wanted to establish homeownership to credit challenged individuals or those with little to no money for a down payment. In general, subprime mortgages carried interest rates about 2% higher than prime mortgage loans. In the subprime lending industry, it was the norm for borrowers to endure higher fees and interest over prime borrowers. However, it is plausible that some subprime borrowers qualified for prime rates, fixed terms, and lower fees without being aware of it. Subprime borrowers' lack of knowledge regarding mortgage processes and products offered might have caused many homeowners to take on risky loans. Up to 40% of subprime borrowers met the criteria for lower interest rates on prime mortgage loans (Immergluck, 2011). This statistic demonstrates that thousands of subprime borrowers might not have been aware of their mortgage loan options.

Subprime loans allowed lenders to approve borrowers with credit or income issues. In the subprime mortgage industry, the credit qualifying methods mortgage lenders used to attract borrowers with questionable credit were out of control and ultimately negatively affected subprime mortgage borrowers (Dahl, 2010). A higher credit score was the primary indicator whether a prime loan or subprime loan would be applicable for the borrower (Ding, Quercia, Reid, & White, 2012). Before subprime loans, individuals with credit or income issues might not have qualified for a home loan at all (Karikari, Voicu, & Fang, 2011). During the early 2000s, even a credit-challenged borrower received approval just with riskier terms. For example, a prime loan amount of \$250,000 for a borrower with a 660 FICO score may carry an interest rate with a range of 4–6%, whereas the same borrower carrying a subprime loan may carry a 7–10% interest rate (Karikari et al., 2011). Karikari et al. (2011) suggested that subprime loans have higher interest rates and lending expenses due to risk exposure and subpar credit standing. The information above illustrates that subprime borrowers paid higher fees and interest rates to obtain a home mortgage loan.

By the start of the 21st century, subprime loans were rampant and the norm for most lenders (Graff, 2014). Since the banks profited more from a subprime loan compared to a prime loan, they approved as many subprime loans as possible (Mian, Sufi, & Trebbi, 2010). By 2008, some business analysts believed the mortgage catastrophe in the United States was more dangerous to U.S. economics than terrorism (Guiso, Saipienza, & Zingales, 2013). Mian et al. (2010) acknowledged that several mortgage lenders were accused of specifically targeting ethnic minorities. The disaster of

subprime lending contributed a tremendous setback in wealth for some ethnic minorities in the United States (Perryman, 2012). Unfortunately, ethnic minorities became frequent victims of unscrupulous mortgage lenders.

These types of practices by lenders magnified the term *predatory lending*. Although used together, subprime lending and predatory lending are different. Subprime lending, whether with credit cards or mortgages, normally connects to someone's financial position; predatory lending is a conscious effort to deceive and then financially benefit from the act (Perryman, 2012). Current laws do not prohibit predatory lending, though considered unethical (Faber, 2013).

### **Predatory Lending**

Predatory lending is the act of deliberately lending money to an individual who cannot repay the loan (HUD, 2012). An alarming problem exists regarding predatory lenders who fail to educate consumers regarding loans (Docking, 2012). The lender loaning the money hopes and expects the borrower will default, so the lender has legal rights over the collateral. Bankers focused too much on their forecasted levels of profit rather than suitability of the subprime loan for the consumer (Mian et al., 2010). In 2011, the U.S. Federal Reserve Board deemed that, between 2004 and 2008, Wells Fargo employees inappropriately steered more than 10,000 borrowers into subprime mortgages or falsified borrowers' loan documents (Fannie Mae, 2013). Subsequently, Wells Fargo banned over 20 of their employees from working in the financial industry ever again, and the borrowers affected received a massive settlement (Mayer, Cava, & Baird, 2014). This example of Wells Fargo employees deliberately steering borrowers into subprime loans

showed that many homeowners were naïve to the subprime loan process because of a lack of knowledge and experience. Researchers at Freddie Mac and State Lending Predatory Reforms found that between 1996 and 2004, up to 35% of or nearly 2.6 million subprime borrowers could have qualified for prime rate loans (Docking, 2012).

Predatory lending can occur several ways. One common protocol is refinancing the same home every several months and charging higher fees every time. Many banks continue to exercise these practices. Furthermore, the mortgage-governing committees did not put policies in place to regulate or stop predatory lending. According to Mian et al. (2010), lawmakers passed several laws never signed into legislation. These bills include the following (a) American Dream Down Payment Act of 2003, which aimed to increase homeownership among low-income communities by providing assistance with down payments and closing costs; (b) the Ney Kanjorski Responsible Lending Act of 2005, which would have preempted state regulations on predatory lending; and (c) the Prohibit Predatory Lending Act of 2005, which would placed more stringent controls on subprime lenders (Mian et al., 2010). More examples of bills that were never signed into legislation include (a) the Mortgage Reform and Predatory Lending Act of 2007, which was a revised version of the Prohibit Predatory Lending Act that eventually passed the House (but failed in the Senate), and (b) the Federal Housing Finance Reform Acts of 2005 and 2007, which sought to tighten regulation of Freddie Mac and Fannie Mae (Mian et al., 2010).

Subprime lending has affected all groups, but it has especially affected African Americans in the middle- to low-income demographics (Phillips, 2012). Dymski,



Hernandez, and Mohanty (2013) found that the intent of subprime lending was to help minority and lower income families obtain housing when they could not qualify for conventional mortgages because of poor credit history and income levels. Lenders failed to educate consumers regarding the parameters of their loan, creating financial hardships for themselves and local communities (Singh & Bruning, 2011). Based on the research, some subprime lenders targeted specific races hoping they would agree to take a subprime loan since they might have not qualified for a prime loan (Dymski et al., 2013). In 2006, the National Association of the Advancement of Colored People accused Wells Fargo of discriminating against African Americans (Seide, 2012).

The National Association of the Advancement of Colored People entered into a settlement with Wells Fargo regarding this plight after alleging that Wells Fargo's lending practices caused a disparate impact on ethnic minorities (Seide, 2012). Published data indicated predatory lending existed in the subprime mortgage market and was more concerning in urban neighborhoods (Agarwal, Amromin, Ben-David, Chomsisengphet, & Evanoff, 2014). Banks initially targeted borrowers who met legitimate property and borrower requirements for subprime loans, but over time, they focused on the race of the borrower (Casey et al., 2011). Subprime lending impeded wealth accumulation and provoked the foreclosure crisis, exhausting wealth especially for ethnic minorities (Agarwal et al., 2014). For ethnic minorities, accessing credit from the banks is harder than for Whites to obtain approved credit.

African Americans may be the most challenged ethnic minority when looking at credit. African American wealth is equivalent to less than a quarter of all other average

Americans' wealth (Phillips, 2012). According to Casey et al. (2011), African Americans are 36.3% less likely to receive credit from banks than non-African American borrowers. A study conducted by Philips (2011) showed African American females received the majority of high-cost loans and were over twice as likely to obtain a subprime mortgage over European American females. Moreover, African American women were 5 times more likely to have received a subprime loan than similarly situated European American males.

Another empirical study done by DeLoughy (2012) found stark discriminatory practices by subprime lenders on the Hispanic community. Data were obtained from Home Mortgage Act Disclosure on three cities in Connecticut that have one of the highest percentages of subprime mortgage homeowners in the nation. Regression analysis was used on four variables. Results show race and ethnicity were significant determinants of subprime lending in these three cities. These statistics support the existence of the predatory lending market among ethnic minorities. Furthermore, predatory lenders may concentrate on social dilemmas such as race or ethnicity as a trigger point to help attract these specific borrowers. Accordingly, stewardship behaviors can transpire within, but are not limited to, the context of classical social dilemmas (Hernandez, 212). Stewardship behavior can be found to emerge within the context of social dilemmas. In the case of lenders who perform predatory practices while catapulting off of social dilemmas and issues, lack of stewardship behavior is performed, and instead agency theory behavior is more likely exhibited.

Not all banks carry out unethical lending practices. However, stark differences exist between the banks that practiced unethical lending protocols versus banks that practiced legitimate lending procedures. San Jose, Retolaza, and Gutierrez-Goiria (2011) looked at the existence of ethical banks and found that they are highly transparent when disclosing their policies. The banks are primarily interested in the amount of depositors' assets and the success of their stakeholders. San Jose et al. determined that integrity, responsibility, and affinity are the most significant attributes necessary to attain trust among bank customers. The causes of the recent mortgage crisis entailed multiple factors, but predatory lending was certainly a prime reason for the crisis. Kapan and Minoiu (2014) reiterated that collapse was from the greed of banks and contended that rectifying problems caused by greed is a difficult feat. The root causes of the economic collapse centered largely around toxic assets in the banking sector based on subprime mortgages (Kapan & Minoiu, 2014).

The lack of understanding of borrowers plays an integral part in predatory lending. It is easier for a banker or broker to steer the borrower into a subprime product if the homeowner is unaware or uneducated with mortgage lending products. The dream of homeownership in America gave way for many lenders to promote predatory lending.

### **Mortgage Fraud**

Mortgage fraud and predatory lending may seem similar but technically have different meanings. Predatory lending involves deceitful lending procedures that include awarding mortgage loans to borrowers who are incapable of repaying loans (HUD, 2012). It also applies to refinancing the same home numerous times and charging higher interest

rates and fees each time. Mortgage fraud is a deliberate deception perpetrated for unlawful or unfair gain (HUD, 2012). Borrowers who furnished falsified documents to their lenders to increase their chance of loan approval committed most types of mortgage fraud (Adjei, 2013). According to Fannie Mae (2013) leadership, there are several types of mortgage fraud, which both the lender and the borrower can commit.

The high-level red flags for mortgage fraud include the following: (a) Social Security Number discrepancies within the loan file; (b) address discrepancies within the loan file; (c) verifications addressed to a specific party's attention; (d) verifications completed the same day as ordered; (e) verifications completed on a weekend or holiday; (f) documentation includes deletions, correction fluid, or other alteration; (g) numbers on the documentation appear to be altered; (h) different handwriting or typesyles within a document; and (i) excessive number of automatic underwriting submissions (Fannie Mae, 2013). Mortgage application red flags are the following: (a) significant or contradictory changes from handwritten to typed application, (b) unsigned or undated application, (c) employer's address shown only as a post office box, (d) loan purpose is cash out refinance on a recently acquired property, (e) buyer currently resides in the subject property, (f) same telephone number for applicant and employer, (g) extreme payment shock may signal straw buyer or inflated income, and (h) purchaser of investment property does not own residence (Fannie Mae, 2013).

Mortgage fraud is applicable with employment and documentation through the following: (a) applicant's job title is generic (e.g., manager, vice president); (b) employer's address is a post office box, the property address, or applicant's current

residence; (c) applicant's residence is (or will be) in a location remote from employer; (d) employer name is similar to a party to the transaction (e.g., uses applicant's initials); (e) employer unable to be contacted; (f) year-to-date or past-year earnings are even dollar amounts; (g) withholding not calculated correctly; (h) withholding totals do not match from pay advice to pay advice; (i) pay period dates overlap or do not agree with other documentation; (j) abnormalities in paycheck numbering; (k) handwritten verification of employment, pay stubs, or W2 forms; (l) W2 form presented is not the employee's copy; and (m) employer's identification number has a format other than 123456789 (Fannie Mae, 2013). Individuals committing mortgage fraud tend to be creative with their tax documents. Other exercises of mortgage fraud with tax documents include the following: (a) income appears to be out of line with type of employment; (b) self-employed applicant does not make estimated tax payments; (c) real estate taxes or mortgage interest claimed, but no ownership of real property disclosed; (d) tax returns not signed or dated; (e) high-income applicant without paid preparer; (f) paid preparer signs taxpayer's copy of tax returns; (g) interest and dividend income do not align with assets; (h) applicant reports substantial income but has no cash in bank; (i) large increase in housing expense; and (j) reasonableness test—income appears to be out of line with type of employment, applicant age, education, or lifestyle (Fannie Mae, 2013).

According to statistics as recent as August 2013 by Fannie Mae (2013) leadership, a plethora of mortgage fraud on mortgage loan originations occurred in 2012. California has six of the top 10 counties in the United States where mortgage fraud was the most prevalent: San Ramon, Downey, Canoga Park, Whittier, San Jose, and Riverside (Fannie

Mae, 2013). These statistics confirm that mortgage fraud and predatory lending still are applicable in the mortgage lending industry.

A study by Nguyen and Pontell (2010) looked at possible evidence of fraud by examining 23 individuals working in the subprime industry. Twenty-three face-to-face interviews were conducted by use of purposeful sampling. Secondary data from archived reports were also used within the study. The researchers associated rational choice theory with the study. Rational choice theory was introduced by Jevons in the late 1800s, according to Nguyen and Pontell. This theory is a framework for understanding and formally modeling social and economic behavior. The interviewees worked at brokerage offices, lenders, appraisal companies, and settlement offices. Nguyen and Pontell found that the subprime mortgage industry provided monetary incentives for brokers who steered borrowers to subprime mortgages. The researchers noted that the subprime mortgage industry provided an opportunity for fraud in the banks. The rational of these mortgage industry associates was clearly to take advantage of the lending system and product (subprime instruments) in order to self-gain and monetize. In this specific example of rational choice theory, the rational and purpose of the mortgage industry associates personified the complete opposite of stewardship behavior within an organization or company. Stewardship construct focuses on the shared sense of responsibility to multiple stakeholders of the organization, which ultimately affects the collective welfare of associates within the organization (Hernandez, 2012).

There were many products offering creative financing, appraisers manipulated their valuation reports, and borrowers were willing to falsify income or other information

in order to obtain a loan. Mortgage fraud could create the opportunity for lenders or brokers to take advantage of borrowers. Some borrowers engulfed in the notion of being a homeowner might falsify their income to reach loan approval. Lenders would take the word of borrowers for income verification purposes in place of actual paystubs or bank statements for subprime mortgages; loans such as a stated income loan required no income documentation (Keys, Seru, & Vig, 2012). Borrowers knew they were applying for a stated loan and took advantage of proof by verbal protocol. Using stated words of borrowers instead of verified proof of income when approving loans might have led to misrepresentation by borrowers.

### **CEO and Leadership Behavior**

The subprime mortgage crisis has sparked national and even international debate on who is held accountable for the economical debacle. Many factors are to blame. One facet of the crisis that seems to create controversy is the role that lender CEOs and executive decision makers play. The approach and inhibition theory of power suggests that the interests powerful CEOs will seek to fulfill, driven by the behavioral approach system, lead them to engage in risky behavior (Lewellyn & Muller-Kahle, 2012).

Lewellyn and Muller- Kahle (2012) advocated CEOs focused on the potential upsides while ignoring the downsides of their decisions. Chang and Chen (2013) looked at the correlation between increasing peer pressure, high-incentive compensation, and CEO portfolio-management decision making. According to Chang and Chen, several empirical studies have shown a strong causal relation between CEO incentive structure and risk profile of a firm. Chang and Chen also noted that the quality of a portfolio held by

financial firms deteriorated as market players lowered their underwriting standards, done to enlarge their share of the subprime mortgage market. Higher delinquency rates eventually proceeded, and in consequence, foreclosures caused a great loss to the financial firms. Once the mortgage bubble burst, financial firms suffered a great deal, leading to CEOs' lack of managing solid portfolio risk.

CEOs followed what their peers were doing without justification (Chang & Chen, 2013). When one CEO purchases \$200 million in mortgage-backed securities, other CEOs tend to follow suit. Chang and Chen suggested that CEOs are tempted to gamble on the risky assets such as subprime mortgages in order to create more profitability. As their compensation structures rely heavily on the firm's net-contribution bottom line, CEOs tend to take greater risks, including putting the firm in financial jeopardy. Chang and Chen suggest that incentive structures for CEOs should be modified. The incentive structure should not just mirror the bottom line net contribution in order to create more balanced portfolio-risk decision making.

### **Risk-Management Strategies and Inefficiencies of Subprime Loan Portfolios**

Loan portfolios can represent two separate lines of business or income for banks. One business line or source of income comes from the ownership of the loans and the earning of interest fees thereon. The second line of business involves the servicing of the loan, for example, the keeping of records, collection of periodic payments and enforcement in the form of loan foreclosures (Ellul & Yerramilli, 2013). Financial institutions such as banks own large portfolios of mortgages and other closed-end loan instruments. Larger banks such as Bank of America, US Bank, Wells Fargo, and Citibank



underwrite loans or purchase loan portfolios of other banks; these banks also sell a portion of their own loan portfolio off to their bank competitors. Customarily, banks continually assess and reassess the loan quality within their loan portfolio. Quality can range from interest rate earned, FICO score of customer, customer payment history, and type of loan (Louzis, Vouldis, & Metaxas, 2012).

High-level bank managers are responsible for managing loans that can total in the billions of dollars both as loan instruments and as products that require servicing. Bank leaders offered subprime mortgages as part of their loan offering for many reasons. Bushman and Williams (2012) suggested that diversification of loan offering seems to have a downward effect on monitoring efficiency, increasing the nonperforming loans. However, loan portfolio concentration should raise monitoring efficiency, as it is easier for banks to catch problem loans before problems deteriorate. When a pool of subprime mortgages is blended into a loan portfolio of other performing loans, the propensity greatly diminishes of bank risk officers noticing any issues.

The role of securitization played an integral role in banks loan risk-management inefficiencies. Petersen, De Waal, Mukuddem-Petersen, and Mulaudzi (2014) affirmed that securitization increases credit availability across sectors as it reduces the sensitivity of bank loan portfolios toward availability of the traditional sources of financing such as bank deposits. During the subprime mortgage crisis, the credit supply of banks with more liquid (securizable) loan portfolios was less susceptible toward shock of a damaged portfolio than that of a bank with a less liquid loan portfolio (Petersen et al., 2014). Regardless, a plethora of reasons was to blame for lack of risk-management strategies

and oversight of bank loan offerings. Many consumers blamed the internal policy and risk-assessment procedures of the banks regarding offering of subprime mortgages. Other consumers and banking professionals blamed CEO greed.

One argument, noted by Ellul and Yerramilli (2013), is that bank executives with high-powered pay-for-performance schemes were exploiting deficiencies in the internal control systems, and risk managers were unable or powerless to restrain them. Their quantitative study looked at hedging theories in calibration with risk management. The researchers argued that firms that are more likely to experience financial distress should also be more aggressive in managing their risk. The main hypothesis of the study was U.S. banks with strong and independent risk-management functions should have lower enterprise risk, after controlling for the underlying risk of their business activities. Data were retrieved from proxy filing statements with the Securities and Exchange Commission. Results indicated that bank managers were unaware of their risk exposures with subprime mortgages because they were assessing risks historically and were neglecting what appeared to be low-probability, nonsalient events that turned out to be significant (Ellul & Yerramilli, 2013). Banks are in the business of taking risks, so some banks optimally chose a high-risk management strategy or coupled a high-risk loan appetite with inefficient risk-management procedures. Adversely, bank executives who felt they had strong risk-management protocols such as hedging loan portfolios might have felt the security in taking higher loan exposure, albeit the offering of subprime mortgages (Cetorelli & Goldberg, 2012). According to Caldwell and Karri (2005), stewardship governance is associated with several structural factors such as managerial

practices, leadership, policies, procedures, and system routines. The negligence in assessing risk and having a high-risk appetite, as noted above in the case example, may be an example of stewardship governance deficiencies. A breakdown in leadership, risk routines, or lax policies might have contributed to these banks acquiring riskier loans and in turn create tremendous burden and losses for the organization.

Many regulatory bank initiatives were set in place after the subprime mortgage crisis. The Basel Committee of Supervision, which was created in 1974 by the central bank of governors, redefined the *Principles for Sound Liquidity Risk Management and Supervision* in 2008, and again in 2009, to provide stricter loan risk-management oversight (Cetorelli & Goldberg, 2012). The Basel Committee of Supervision has since adopted many new measures and protocols to ensure operational and systematic risk is mitigated in the banking sector.

### **Illusive Victims**

Coppedge (2011) looked at the responsibility the homeowner has when taking on a home mortgage loan. The homeowner's lack of foresight overlooked the planning of future income and the possibility of misfortunes (Coppedge, 2011). The lack of preparation and understanding contracts was an additional flaw in planning preparation. The failure to assess the credit rating honestly in spite of the offer to accept an inflated mortgage loan was irresponsible. Coppedge suggested that homeowners' disregard in questioning the terms of the contract contributed to their failure in seeking competent legal help. The borrowers' understanding of the complexity of the documents was their responsibility. A signature would waive any of the rights that they might have had, had

they not signed the contract before seeking education and legal advice (Coppedge, 2011). Just as there is a tremendous amount of scrutiny on the lenders and brokers in the subprime mortgage crises, many bankers and professionals in the industry believe the borrowers have responsibility. Coppedge advocated this subjective principle.

### **Fannie Mae**

Established in 1938 during the Great Depression, the Federal National Mortgage Association, more commonly known as Fannie Mae (2013), is a government-sponsored enterprise (GSE) with a primary purpose to free up lending activities and create more lending accessibility to the general public. In 1968, Fannie Mae became a publicly traded company on the New York Stock Exchange. Since this time, another contributing goal for Fannie Mae has been to expand the secondary mortgage market by securitizing mortgages and packaging them up in mortgage-backed securities. This allows lenders to reinvest assets into more lending activities, helping to increase lenders in the mortgage market. This creates more room for lenders to open up their doors and essentially stay in business. Fannie Mae makes the majority of the underwriting standard rules for the mortgage industry, and lenders need to abide by these guidelines. Another GSE enabling more lending opportunities in the market is Freddie Mac.

### **Freddie Mac**

The government established the Federal Home Loan Mortgage Corporation, more commonly known as Freddie Mac, in 1970. Also a GSE, the goal for Freddie Mac was to provide more choices for American homeownership. Along with Fannie Mae, Freddie Mac bought mortgages on the secondary market and pooled them into mortgage-backed

securities. As of September 7, 2008, Freddie Mac and Fannie Mae were both put under a conservatorship held by the Federal Housing Finance Agency (Fannie Mae, 2013). The government created Fannie Mae and Freddie Mac to help generate additional options for borrowers and lenders. In 1934, another GSE, the Federal Housing Administration (FHA), began.

### **The Federal Housing Administration (FHA) and U.S. Department of Housing and Urban Development (HUD)**

Creating the FHA assisted low-income and ethnic-minority borrowers. FHA gave several incentives to lenders to lend to riskier or nonprime borrowers. Insuring lenders against default of the loan is the purpose of the FHA (HUD, 2012). This takes a tremendous amount of risk off of the lenders, as any loan given under the FHA guidelines is the responsibility of the FHA, regardless of whether the borrower defaults. Lenders feel more compelled to lend to lower income borrowers under the FHA guidelines because the liability lies with the FHA. The FHA allows as low as a 3.5% down payment on a house purchase (HUD, 2012). This compares to most conventional loans that require a 10–20% down payment.

Since FHA loans provided limited risk to lenders, mortgage outfits increasingly offered FHA loans. From the 1940s through 2003, FHA mortgage loans were the primary choice for borrowers with risky credit, but between 2003 and 2007, subprime mortgages comprised the majority of that target market (Karikari et al., 2011). Both FHA and subprime mortgage loans aided in providing more opportunities to borrowers with riskier qualifications. FHA certainly helped bolster homeownership in the United States.

Looser underwriting guidelines for FHA mortgage loans did provide more loans for the lenders and the general public. In many cases, the FHA guidelines were more lenient than conventional loans underwritten by Fannie Mae or Freddie Mac. One example of an FHA guideline that spurred more lending was the allowance of secondary income (Karikari et al., 2011). FHA allowed secondary income from other individuals living in the same household as the borrower. These individuals were not obligated to be on the loan and therefore were not financially responsible for the loan. However, their income helped the borrower secure the loan. Guidelines like this resurrect the debate on whether or not some borrowers can afford the loans they receive.

Another agency created to assist credit-challenged borrowers in obtaining home financing is HUD. Established in the 1960s, HUD is a government-created agency to assist credit-challenged mortgage borrowers (HUD, 2012). HUD created assistance for new homeownership but also focused on building communities as a way to redevelop areas with struggling housing issues, such as abandoned and vacant homes (HUD, 2012). HUD plays an integral role in what lenders can or cannot offer to the public in respect to FHA loans. This agency has authoritative powers over many of the mortgage standards in the industry. In 2008, HUD made updates in FHA loans designating changes for FHA-approved lenders. If FHA-approved lenders did not follow HUD requirements, then the lender would risk losing FHA privileges (HUD, 2012).

### **Foreclosures**

Foreclosures continue to be a financial detriment to the U.S. economy. Immergluck (2013) described a correlation can be inferred between the amount of loans

made after the turn of the 21st century and the amount of foreclosures the United States has seen since 2006. Because of the discriminatory practices the banks were conducting, foreclosures affected tens of thousands of individuals across America (Ding et al., 2012). Banks have made it difficult to maintain the mortgages given to their consumers; therefore, they have adversely affected housing opportunities (Singh & Bruning, 2011). These increased restrictions on available credit opportunities are resulting in potential homebuyers finding it difficult to obtain mortgages. This peculiar situation can reduce the demand for home purchases and continues to lower home prices. Approximately 1.5 million households had to foreclose due to the inability to make mortgage payments in 2009 alone (Singh & Bruning, 2011). According to Singh and Bruning (2011), bank restructuring is necessary to combat increased loan defaults and damage to consumer credit.

As of October 2013, over 1.24 million properties in the United States were in some stage of foreclosure—default, auction, or bank owned (Realtytrac, 2013). According to Realtytrac (2013), 1 in every 943 properties in California foreclosed, with the highest ratios in Plumas and Tulare counties. From the fourth quarter of 2007 to the second quarter of 2012, 1.5 million Californians received a foreclosure notice, and more than 785,000 Californians have lost their homes due to a foreclosure (Realtytrac, 2013). Between 2006 and 2009, California alone had more than 650,000 property foreclosures (Christie, 2013). According to Christie (2013), California has the highest amount of homeowners in comparison to all other states within the United States, nearly \$22 million in mortgages. As noted by Realtytrac, more than 2 million homeowners in California or

30% of all homeowners in California still have mortgage balances that exceed the home value. These statistics suggest many more foreclosures are still to occur within the state of California.

### **Housing and Economic Recovery Act**

The purpose of the Housing and Economic Recovery Act of 2008 was to address the subprime mortgage crisis (HUD, 2012). This act allowed FHA to guarantee up to \$300 billion in new 30-year fixed mortgages for subprime borrowers, as long as the lenders wrote down principal loan balances to 90% of current appraisal value. According to HUD (2012), this act was intended to restore confidence in Fannie Mae and Freddie Mac by injecting capital into these two mortgage outfits so they can lend and restructure subprime mortgages of the general public.

### **The Consumer Financial Protection Bureau (CFPB) and Qualified Mortgage (QM) Rule**

The Dodd Frank Wall Street Reform and Consumer Protection Act of 2010 established the CFPB. According to the CFPB (2014), the entity supervises and monitors several functions within the financial sector. These functions include the following: (a) write rules, supervise companies, and enforce federal consumer financial protection laws; (b) restrict unfair, deceptive, or abusive acts or practices; (c) take consumer complaints; (d) promote financial education; (e) research consumer behavior; (f) monitor financial markets for new risks to consumers; and (g) enforce laws that outlaw discrimination and other unfair treatment in consumer finance.



Since its inception in 2012, the CFPB has been extremely active in the lending regulations for mortgages. According to the CFPB (2014), it is working on implementing two cardinal rules to fundamentally change how the mortgage industry works. The first rule requires lenders to make mortgages only after they have fully verified that the borrower can reasonably afford to pay the loan back. The second law looks to help homeowners avoid foreclosures during times of economic hardship. This rule advises the lenders to try everything in their power before starting the foreclosure process.

As of January 10, 2014, the CFPB issued a final rule to implement laws requiring mortgage lenders to consider consumers' ability to repay home loans prior to extending them credit. According to the CFPB (2014), the final rule contains the following key elements in regards to ability to repay loans. At a minimum, creditors must consider eight underwriting factors: (a) current or reasonable expected income or assets; (b) current employment status; (c) the monthly payment covered transaction; (d) the monthly payment on any simultaneous loan; (e) the monthly payment for mortgage-related obligations; (f) current debt obligations, alimony, and child support; (g) the monthly debt-to-income ratio or residual income; and (h) credit history (CFPB, 2014).

The Dodd-Frank Act sets certain prerequisites and affordability underwriting requirements for the QM rule. According to the CFPB (2014), the final rule implements statutory criteria that generally prohibits loans with negative amortization, interest-only payments, balloon payments, or terms exceeding 30 years from being QMs. The rule also establishes that monthly payments be calculated based on the highest payment that is applied in the first 5 years of the loan. The maximum debt-to-income ratio should be

43%. The no-documentation or stated income loans where creditors do not verify income or assets cannot be considered a QM. Finally, a loan cannot be considered a QM if the points and fees paid by the consumer exceed 3% of the total loan amount. Prepayment penalties are also generally prohibited for a QM, except for certain fixed rate products.

According to the CFPB (2014), there is a concern that creditors initially may be reluctant to make loans that are not QMs, even though the loan may be responsibly underwritten. Therefore, the rule provides for a second, temporary category of QMs. This category has more flexible underwriting requirements as long as the loan satisfies the underwriting eligibility for purchase, guarantee, or insured by a GSE. The GSE includes the Fannie Mae and Freddie Mac conservatorship, the Federal Housing Finance Agency. FHA and HUD, the Department of Veterans Affairs, and the Department of Agriculture or Rural Housing Service are entities that will also insure or guarantee certain QM loans.

According to the CFBP (2014), this specific Dodd-Frank rule does not impose lenders to stop issuing non-QM loans. Lenders are still able to offer subprime loans, stated-income loans, and high-rate loans but must take onus and service the loans in their portfolio. Ultimately, these loans are the sole responsibility of the lender as they are not sellable or insured on the secondary market. This loophole for lenders to still create non-QM loans still leaves the subprime mortgage and foreclosure crises open for future debate.

### **Enterprise Risk Management (ERM)**

ERM has emerged as best practice technique for many banks to mitigate and control risk due to the recent financial and subprime crisis experienced. ERM was born

out of the realization that banks are operating in a dynamic environment which is characterized by constant, complex and rapid changes and require a more integrated approach to risk management (Kanhai & Ganesh, 2014). According to Ai, Brockett, Cooper, and Golden (2012), ERM is a process that takes a holistic view of risk management and attempts to reduce the probability of large negative earnings and cashflow by coordinating offsetting risks across the enterprise. The committee of Sponsoring Organizations of the Treadway Commission defined ERM as the following: a process, affected by an entity's board of directors, management, and other personnel, applied in a strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity goals (Kanhai & Ganesh, 2014). An important assessment in determining whether effective ERM tactics are exhibited may be predicated by the institution's risk culture. Research has found a very strong correlation between taking culture into account and successful ERM implementations (Kanhai & Ganesh, 2014). Creating a culture for risk management in the financial sector is the key to implementing a successful ERM system (Gavalas & Syriopoulos, 2014). Roslan and Dahan (2013) defined risk culture as the norms and traditions of behavior of individuals and of groups within an organization that determine the way in which they identify, understand, discuss, and act on the risks the organization confronts and takes.

Much of the emphasis of this study was to determine what risk-management protocols were in place to mitigate subprime mortgage turmoil for the banks being

examined. Moreover, the study determined if stewardship behavior was applicable in conjunction with the risk culture displayed in the financial institution. Several interview questions for the participants in this study were geared to assess whether risk culture, ERM, or other risk protocols were in place to help mitigate subprime lending risk.

### **Transition and Summary**

Subprime mortgages grew at an astonishing rate from the 1990s to the early 2000s. Due to the high profit margins of these loans, the majority of banks offered subprime mortgages to potential homeowners. The end result for these lenders was generally not favorable, as mass bank takeovers, acquisitions, and closures commonly took place. The few bank leaders who elected to decline the offering of these risky loans had the foresight and calculated risk management strategies set in place to overcome this tempting sale of commodity. Lack of stewardship behavior was a common theme uncovered in the literature research. The next section is a detailed exploration of the study, which includes the purpose of the study, research methodology, design of the study, and the role of the researcher.

## Section 2: The Project

Section 2 includes detailed information regarding the methodology and research project. The research project was a qualitative case study as I determined this to be the most suitable methodological approach. This next section includes reiteration of the purpose statement along with some background data. Furthermore, Section 2 describes the role of the researcher, participants, method and design, data collection, and reliability and validity.

### **Purpose Statement**

The purpose of this qualitative multiple-case study was to explore risk-management strategies and policies of those bank leaders who evaded implosion to their mortgage portfolios. The population for the study was four executive financial leaders (CEO, CRO, vice president, or of similar authoritative status) from four separate banking institutions within California who avoided the subprime mortgage crisis with little or no financial effect on their organization. Data from this study may provide information to banks regarding mortgage-lending practices. A contribution to social change is applicable by creating awareness to both consumer and bank leaders on loan risk assessment. Creating social awareness about bank loan risk assessments may result in more informed decision making from consumers in relation to their mortgage borrowing needs.

### **Role of the Researcher**

I abided by the Belmont Report, which was established in 1979. The Belmont Report provides ethical principles and guidelines for research involving human subjects (Brakewood & Poldrack, 2013). The Belmont Report outlines basic ethical principles

such as respect for individuals, beneficence, justice, informed consent for participants, and more. The role of the researcher was to conduct semistructured interviews using open-ended questions with participants and properly documenting data collected. I was responsible for identifying, gathering, and organizing data. To maintain integrity within the study, it was integral to ask applicable questions, listen to the participants through an unbiased lens, and understand the detailed issues of the study (R. K. Yin, 2012). With a review of the literature, I gained a deeper understanding of risk-mitigation efforts against subprime mortgages and the banking leadership decision making around this topic. To remain unbiased, I approached the study as an independent observer and acted only to gather data, while leaving out any personal beliefs. I used an appropriate interview protocol throughout the study to ensure integrity of the research and protect the confidentiality of the participants. An interview protocol is a procedural guide to follow before, during, and after the interview to help elicit rich and accurate data (R. K. Yin, 2012). Good case study integrity should include evidence by using multiple sources of information and a case study database for easy retrieval and organization of data (R. K. Yin, 2014). I reviewed the interview data to interpret and identify common themes and patterns that emerged from the study.

### **Participants**

This qualitative study included purposive sampling to select participants who had lending risk-management authority within their banking organization during the subprime mortgage peak of 2000–2008. A purposive method was chosen due to the select few of financial institutions that managed lending risk successfully during the subprime

mortgage era (HUD, 2012). I used purposive sampling to find study participants who would offer insight into the case (Palinkas et al., 2013). Suri (2011) noted that purposive sampling needs access to the right participants from the public to provide quality data to a study. The purposive sample size was four executive-level banking officials. The use of at least four executive-level financial leaders who opted not to or limited lending on subprime mortgages was sufficient to conduct interviews and in turn create more persuasive results. Based on my research, a majority of the banks that provided subprime mortgages had broken risk-mitigation processes in place. Some financial institutions did not employ CROs or did not have overlays in place within their risk department to accurately assess risk with their products. These four organizations being studied were anomalies during the subprime mortgage peak as their risk-mitigation strategies aided their decision to avoid the offering of subprime mortgages or limited subprime mortgage exposure on their loan portfolio. All four organizations have a mortgage-lending platform and strive to compete in the mortgage market share. They had ample opportunity to participate in the subprime mortgage offering but opted to minimize or completely neglect it all together. All four financial firms have liquid assets in the billions of dollars and have presence throughout California. The units of analysis studied were these four financial organizations. All four leaders were successful in risk-mitigation processes and helped aid their organization against subprime mortgage implosion.

In this study, the banking strategies financial leaders delivered during the subprime mortgage cycle were explored. The participants in this study were willing to share their decision making and banking initiatives in relation to the subprime mortgage

products. Kalinic and Forza (2012) used purposive sampling when looking at decision making to consolidate small and medium enterprises. Using a purposive sample method helped me determine the financial leaders for the study. Since I am in the banking sector, I have a vast network of colleagues who participated in the mortgage industry during the subprime mortgage peak of 2000–2008. My network enabled me to connect with these banking leaders via social media and in turn create communicate via e-mail every several months. The interviews took place face-to-face, and follow-up interviews were conducted over the phone.

After the participants agreed to become part of the study, they electronically received a consent form prior to any interviews taking place. To protect study participants, their identities and the organization names remain confidential. Interviews were audio recorded using a portable recording device. My detailed notes were mandatory during the interviews. All data connected with the study will be locked safely for 5 years; after this 5-year period, I will destroy any related documentation.

### **Research Method and Design**

The research method and design were carefully selected and analyzed after the completion of the problem statement (Buschman, 2014). Marshall and Rossman (2011) described the research design as the section of feasibility. In most scholarly written studies, a researcher can choose from three methodologies: qualitative, quantitative, or mixed-methods design. Qualitative method looks at the why and how and is focused on an in-depth understanding of human behavior, whereas the goal of quantitative research is to seek empirical data to support or reject a hypothesis (Marshall & Rossman, 2011).



## **Method**

A quantitative research method uses different approaches to collecting data compared to qualitative. Furthermore, the investigation is empirical and relies heavily on statistical analysis (Marshall & Rossman, 2011). A mixed-method design is a robust project, as the researcher must include both aspects of qualitative and quantitative data (Marshall & Rossman, 2011). Quantitative and mixed-methods designs prevent exploratory questioning, which made both of these designs unfeasible for this study. This research explored banking leader risk-mitigation strategies during the subprime mortgage peak of 2000–2008 (Guangdi & Fulwood, 2013). Therefore, it was incumbent to explore these strategies through the collection of semistructured interviewing using open-ended questions. According to Petty, Thomson, and Stew (2012), a variety of data may be collected to help deepen understanding of a case within qualitative studies that commonly include interviews, observation, and document analysis. The human thought process is affected by the beliefs and values of the individual, and thus researchers must understand that there is more to the answer than rating items on a Likert scale—qualitative research seeks to provide that understanding (Thomson, 2011).

## **Research Design**

This study explored specific cases within the banking sector. A case study approach attempts to understand several decisions about the motives and implementations of the decision making (R. K. Yin, 2014). Moreover, a case study is a research approach that is used to generate an in-depth, multifaceted understanding of the complex issue in its real-life context (Tsay & Brady, 2012).

The current study involved open-ended, semistructured interviews to create in-depth and meaningful research. Interviews were conducted with all four participants in an effort to reach data saturation along with member-checking techniques. There is a higher likelihood of reaching data saturation if the data collection is purposeful (Palinkas et al., 2013). Moreover, saturation determines the purposeful sample size (Walker, 2012). A researcher attempts to reach data saturation when no new themes emerge, no new data are collected, and there is ample information to replicate the study (Dworkin, 2012). The more precise a question, the quicker it tends to reach data saturation (Palinkas et al., 2013). Qualitative case studies are largely used throughout the doctoral practitioner spectrum in different study topics. Wynn and Williams (2015) advocated the use of case study research as a prominent method in the information system research field. Likewise, Da Mota Pedrosa, Näslund, and Jasmand (2012) examined the quality of case studies completed in the supply-chain management industry.

Other qualitative designs such as phenomenological, narrative, and ethnographical were not appropriate for this specific research. Phenomenological focuses on a human experience or phenomena, which was not the scope of this study. In general, phenomenological research is more suited for studying affective, emotional, and often intense human experiences (Merriam, 2014). This particular study did not convey the need to study these human aspects. Ethnography research can require intensive fieldwork, including the direct observation of participants while immersed in the study of culture (Punch, 2013). This nature of this study was more about definitive strategies as opposed to culture, and therefore, ethnography was not an appropriate design. Lastly, a narrative

design was not appropriate for this study since this was not a story of one's life (Marshall & Rossman, 2011).

### **Population and Sampling**

The intent of this study was to understand risk-mitigation processes used by a small sample of bank leaders who avoided the subprime mortgage implosion. My sampling method was purposeful by selecting four participants who met the same criterion of a banking leader who did not offer or limited subprime mortgages due to efficient risk-mitigation strategies. An interview with each participant was conducted along with member checking to reach data saturation. In addition, I obtained public information about each bank from various online sources which yielded a better understanding of the organizations' practices, goals, and core values and aided in the alignment of the interview questions.

The participant size of four met the Walden University guidelines for doctoral studies. I purposefully selected eligible participants due to their position within the bank, their authority level, and the fact that their financial institution did not implode during the subprime mortgage crisis. Each participant received an invitation to participate along with detailed background information on the research. Interviews initially took place face-to-face in non-work-related locations of the participants' choice. Follow-up interviews took place over the phone.

### **Ethical Research**

Maintaining high ethical standards and ensuring that the researcher meets acceptable criteria and practice standards are nonnegotiable in research (Miller, Birch,

Mauthner, & Jessop, 2012). However, ethical issues may arise at any time during the research process. Marshall and Rossman (2011) cited that quality of research goes beyond the procedural matters. Ethical issues can be applicable in all factions of a research study starting from the subject matter, the research problem, and data collection or interpretation (Buschman, 2014).

Prior to data collection, I secured permission from the Institutional Review Board at Walden University. Once Walden University approved the doctoral study, data collection and interviews commenced. The justification for the selection of participants was based on their knowledge and scope of the research topic. This process resulted in a critical selection criteria and consideration. The recruitment of study participants included individuals meeting the study eligibility criteria, drawn from a personally known pool of business colleagues and industry professionals (Buschman, 2014).

The consenting process consisted of the use of an invitation to participate and an informed consent form all on one document that I sent via e-mail to potential participants. The invitation discussed the topic, design, and purpose of the study. The informed consent outlined ethical concerns to the participants. With the use of the invitation and informed consent document, I informed the participants of the potential risks, voluntary participation, benefits of the study, the right to decline or withdraw from the study, and an outline of efforts to protect their confidentiality and privacy. Participants who agreed endorsed the informed consent document confirming their willingness to participate. There was no incentive for the participants in this study.

Prior to the start of the interview, I reviewed the informed consent document and

reiterated the interviewee's right to withdraw from the study at any time without consequence with each participant. The informed consent document advised the participants that no incentives, payment, or benefits were part of this study. I will keep all participants' records, interviews, hard copy documents, recordings of interviews, and electronic files in a secured, combination lock safe for a minimum of 5 years. After this time has elapsed, I will destroy the documentation by shredding and erase any password-protected electronic data.

Conducting interviews in a private, nonbusiness location of the participant's choice, or over the phone, helped to ensure confidentiality, privacy, and a good environment for this research. As a part of the preparation for the interview process, the study included provisions for the explanation of the details and purpose of the research to each of the participants prior to the beginning of interviews. As an appreciation of the participants' involvement, I will furnish a final copy of the doctoral study to each once complete.

### **Data Collection Instruments**

R. K. Yin (2014) noted case study evidence comes from six sources: documentation, archival records, interviews, direct observations, participant observations, and physical artifacts. For a researcher to do well with a qualitative research study, they must be a respectful listener, an unbiased observer, responsible, and an accurate record keeper (Trier-Bieniek, 2012). Fowler (2013) noted that the researcher is the most important instrument for qualitative researcher by experiencing or listening to the participants during semistructured interviews. The primary instrument was myself. I

created the questions and analyzed the answers based on the themes and concepts put in place.

This study used open-ended interview questions to create comprehensive data collection. Semistructured interviews are guided conversations in an effort to produce consistent and predetermined questions. The interview questions were open-ended by design and encouraged the participants to indulge in the exploration of the specific case at hand. When researching qualitative data, personal opinions and assumptions can be set aside for the greater good of the study. The researcher was the human research instrument in charge of analyzing the data for this study.

The participants electronically received a consent form prior to their participation in the study. I examined the reliability and validity through the consistency of replies along with member checking. Member checking with participants is a technique used to further understand the case study and ensure verification of participant responses. Public information in archived online articles was obtained for each organization to increase my understanding of the banks' risk-management initiatives and strategies. I also asked each participant for any internal documents they would like to share with me to better enhance my understanding of the financial institution.

### **Data Collection Technique**

The collection of data included the following step-by-step process. In-depth, semistructured interviews were conducive for obtaining facts and opinions of participants. The semistructured interview strategy provided the researcher extended time to probe the participant (R. K. Yin, 2014). Semistructured interviews are guided

conversations that aid in the facilitation of predetermined questions. The interview questions were open-ended by design and encouraged the participants to expand into thorough conversations. The use of semistructured interviews allowed the participants to discuss the decision-making process in their own words and allowed me to probe for deeper responses when necessary (Irvine, Drew, & Sainsbury, 2013).

Supporting the notion of interview design, Palmer (2015) used semistructured interviews with business leaders in Gwinett County, Georgia to look at their personal experiences on transitioning from prime to subprime loans. J. Yin and Zhang (2012) used semistructured interviewing with 16 firms, to examine corporate social responsibility in China's emerging market. Matthews (2013) used semistructured interviews to decipher the risk-management tactics in Chinese banks.

Archived documents from each financial institution were found on the World Wide Web. This information was public information. Each participant also had the opportunity to furnish internal institutional documents if they chose. These archived data aided in the better understanding of each financial institution's core values and general banking strategies.

The interviews were tape-recorded. Capturing the responses to the questions of the participants on tape helped heighten the validity and reliability. Member checking was applied to the data. The overarching goal for member checking is to ensure the responses by the participants are authentic, original, and reliable (Perkins, Columna, Lieberman, & Bailey, 2013). After I synthesized the responses and imported data into NVivo 10, I reinstated and summarized the information to the participants to determine

its accuracy through member checking. This allowed the participant to critically analyze the findings and comment on them.

### **Data Organization Techniques**

I organized my data and references through use of a database that I created to store personal logs, transcripts, and archival data, which were password protected. I also used Mendeley Desktop for the organization and synchronization of the literature review resources. To ensure the confidentiality of the participants involved, several key safety measures were put in place. All participants received a consent form electronically. This mitigated liability and protected the rights of the participants. Storage and maintenance of the physical raw materials from the data collection will be for a minimum of 5 years in a locked, secured file cabinet. My Certificate of Completion of training in research with human subjects is presented in the Appendix.

### **Data Analysis**

My intention was the use of data triangulation. There are four types of data triangulation: data triangulation, investigator triangulation, theory triangulation, and methodological triangulation (Fielding, 2012). Data triangulation is the use of multiple data sources to increase reliability and validity (Wood & Dargan, 2012). Data collected from face-to-face interviews were augmented by other data sources such as company documents (Gale, Heath, Cameron, Rashid, & Redwood, 2013).

The data analysis phase consisted of coding, reviewing, categorizing, defining, and combining common statements to identify emergent themes and conclusions (R. K. Yin, 2014). The data coding consisted of key words based on common terms that



emerged from the transcripts review and archived secondary sources. These data were imported into NVivo 10 to help determine accuracy. Coding is the process of tagging segmented data with category names or descriptive words and then grouping the data (Thomas, 2012). Each participant had a unique code (Participant 1, Participant 2, etc.) to distinguish and maintain his or her confidentiality. Constant comparison of transcripts was the tactic to help identify themes related to subprime mortgage risk-mitigation efforts. The transcripts and key terms were entered into Microsoft Excel for organization and prioritization. I visually identified emergent patterns and themes within the Excel database. After defining the themes, I compared and contrasted the answers of the participants.

### **Reliability and Validity**

#### **Reliability**

To ensure the instrument and data collection are reliable, insuring quality is essential. I audio recorded all segments of the interview process. It was imperative that data came from credible participants who were directly involved in the case being studied. Open and honest feedback was essential. The key to building reliability in qualitative research is collecting credible and trustful data (Houghton, Casey, Shaw, & Murphy, 2013). As I was the primary instrument in this study, my personal values, assumptions, and biases were recognized in an attempt to keep them separate from this study. The interview questions were open-ended and concise enough to allow exploration of the participants' information. The use of a succinct interview protocol was critical to help ensure rich and accurate data.

Member checking was a technique I used in the study to increase the reliability of this research. After the participants answered the questions, I reinstated and summarized the information to the participants to determine its accuracy. This allowed the participants to critically analyze the findings and comment on them. For case studies, R. K. Yin (2009) recommended the use of multiple sources to increase validity and reliability. Therefore, I used online published data on the banking organizations being studied. I also asked each participant for any internal archived data they were willing to furnish me.

### **Validity**

There are at least four aspects when it relates to assessing validity in qualitative research: Credibility, transferability, dependability, and confirmability are commonly used (Venkatesh et al., 2013). Dependability and credibility were addressed by the use of member checking. Since the participants were the only ones who could legitimately judge credibility, it was incumbent that they were able to thoroughly inspect their responses and enhance or correct them if need be. Street and Ward (2012) addressed validity with several techniques, most notably through the use of member checks, analysis of archival data, and use of triangulation. Archived data, such as public record information about the institution found on the global web and internal data records obtained from the participants, were used to help triangulate data. A study conducted by Perkins et al. (2013) provided their participants (the parents of 11 children) with the results to confirm the understanding of the responses; this was a form of member checking for these researchers. Transferability was established by keeping accurate records of the participant's data and the use of credible and reliable peer-reviewed sources to ensure the

research context related to the overall scope of the study. Confirmability was accomplished by consistent checking and rechecking of the data throughout the study. This helped ensure the data stayed reliable and accurate.

Data triangulation by use of archived data from online publications added to the overall validity of the research. Data saturation was achieved by holding multiple interviews with each participant. It is essential researchers aim to accomplish validity to establish rigor.

### **Transition and Summary**

Section 2 included prominent areas of the study by presenting the purpose statement, the role of the researcher, selected participants, and the research method and design. A detailed description was provided of the population and sampling along with the data collection instrument, technique, and organization. An overview of both validity and reliability was established. Section 3 includes details of the data collection, analysis, and presentation of the findings.

### Section 3: Application to Professional Practice and Implications for Change

#### **Introduction**

The purpose of this qualitative multiple-case study was to explore risk-management strategies and policies on those bank leaders who evaded implosion to their mortgage portfolios during the subprime mortgage era. During the early part of the 20th century, the United States experienced an overwhelming subprime mortgage implosion with both consumers and banks (Ashton, 2014). Section 1 looked at the problem and the discussion around the issue. Section 2 described the methodology and the plans for this study. Section 3 involves the exploration of the research problem, which leads to the study findings, implications for social change, recommendations for action and further study, reflections, application to professional practice, and study conclusions. I interviewed four executive-level bank leaders from four different financial institutions to explore their risk-mitigation strategies against subprime mortgage portfolio implosion.

The focus of this study was to explore risk-mitigation protocols the leaders of financial institutions employed either to not offer subprime mortgages to consumers or to mitigate these specific losses to their institution. During the subprime mortgage crisis, a preponderance of banks was exposed to far more loan risk than ever before. A majority of banking institutions and mortgage lenders offered subprime mortgages because it was such a profitable commodity (Dell'Araccia et al., 2012). A small percentage of the financial institutions opted not to lend out subprime mortgages to their client base. Any such financial institution was an anomaly during this time period.

### **Presentation of the Findings**

The main research question asked the following: What risk-management strategies were employed by financial leaders of successful firms to mitigate subprime mortgage default? I used semistructured face-to-face interviews to attain in-depth understanding of the participants' experiences and strategies in relation to risk-mitigation processes. The data analysis phase consisted of coding, reviewing, categorizing, defining, and combining common statements to identify emergent themes and conclusions (R. K. Yin, 2014). The data coding consisted of key words based on common terms that emerged from the transcripts reviewed and archived secondary sources, which were validated in NVivo 10. Participants had a unique code (Participant 1, Participant 2, etc.) to maintain their confidentiality and anonymity.

The conceptual framework for this research project was stewardship theory. Many of the participants' responses supported the foundational context of stewardship theory. The theory describes a fiduciary obligation to the institutional interests, while upholding moral behaviors for stakeholders affected by the organizational actions (Hiebl, 2012). Being a good steward to one's organization and clients was described differently by the participants, as one of the interview questions asked to uncover their perspective of being a good steward.

### **Emergent Themes**

This subsection includes the interview questions and findings, which were extrapolated from the participant responses. The section also includes a correlation between study findings and the larger body of literature, the conceptual framework, and

connections or disputes related to the findings and literature on effective business practices. The following are emergent themes uncovered from the interviews:

1. Risk management is a culture imbedded in the workplace.
2. Leaders make prudent and calculated risks on their mortgage lending platform.
3. An enterprise risk committee in place to oversee the overall risk strategies and protocols of the institution.
4. Fiduciary responsibility is to grow responsibility.
5. Consistent guardrails are maintained within loan portfolios for interest rate shock or loan-to-value shock.
6. Leaders use discipline, execution, and right judgment with their risk-assessment processes.

### **Findings by Interview Question**

Participants shared their thoughts and strategies on risk mitigation against subprime mortgage lending. The process of analyzing the raw data from the respondents and secondary data, aided in answering the research question. Following each interview question below are the findings that emerged from the raw data collection process.

**Question 1: Risk-management tools.** The first interview question asked what, if any, risk-management tools were used at the interviewee's bank? The following are participant responses for the first interview question. The overwhelming response was the guardrails instilled to manage the loan portfolio. Guardrails are often used to *shock* the existing loan portfolio. This can be in several formats. The most common guardrails are

increasing the total loan to value or interest rate to see how the collective portfolio performs in the event of an unexpected economic downturn (Levine, 2012). Table 1 shows the most common themes when asking the leaders about their risk-management tools. Shocking and continuous testing with their loan portfolio were consistent among the participants. Inserted guardrails within the loan offerings were also a prominent theme.

Table 1

*Frequency of Themes: Risk-Management Tools the Four Bank Leaders Used*

Theme	<i>n</i>
Manage	75
Portfolio	17
Guardrails	9
Shock	9
Testing	9

Participant 1 indicated the bank's loan portfolio is shocked twice a year. The bank takes the entire loan balance and hypothetically increases the interest rates and calculates the performance over the next 20 years. Participant 2 revealed the bank is risk adverse and very conservative on the lending side. This participant also stated the bank does not incur any risk that cannot be managed. Participant 3 stated that continual stress testing occurs, while external credit reviews from audit firms are a normal routine. This institution uses the Traves Risk application to manage and assess the overall risk. Participant 4 consistently has the loan portfolio shocked and conducts global stress

testing to determine overall exposure. No senior management of today's financial institutions can perform their function without a vastly expanded understanding of the dimensions of risk and the various tools to manage it (Haneef et al., 2012).

**Question 2: Decision-making authority.** In this question, interviewees were asked if branch managers had decision-making authority on their business practices. I asked respondents to describe the foundational layout of the department or persons in charge of risk.

The general consensus between the participants was that credit decision making is centralized. Participant 2 indicated the managers have moderate decision-making authority, whereas Participant 3 stated the managers have authority within the policies of the institution. Risk-management practices are determined by the extent to which managers understand risk and risk management, efficient risk identification, risk-assessment analysis, risk monitoring, and credit risk analysis (Abu Hussain & Al-Ajml, 2012).

Table 2 presents the common themes when seeking to determine the foundational layout of the risk environment. An established risk committee was the predominant theme among the participants. Participant 4 revealed any decision of magnitude must be escalated and signed off by the credit administration. In regards to the foundational layout of the risk process, risk committees and officers are in place. Participant 4 outlined that the risk committee handles all policies and procedures pertaining to all risk-related products. Participant 3 established an enterprise risk committee, but adamantly stated that everyone in the organization is responsible for risk.



Table 2

*Frequency of Themes: Risk  
Foundational Layout*

Theme	<i>n</i>
Risk	147
Risk committee	12
Policies	10

A study done by Aebi, Sabato, and Schmid (2012) investigated whether risk-management-related corporate governance, such as the presence of a CRO on the executive board, is associated with better bank performance. The findings revealed that when a CRO is present and sitting on the executive board, there is a significant change in performance for the better. This study helps expand the knowledge on the importance a CRO or risk committee has within a financial organization.

**Question 3: Risk culture.** Interviewees were asked to describe the importance of the risk culture within their organization. Table 3 presents data indicating that associates' responsibility and performance in helping dictate the risk culture. Participant 1 stated that risk management is very important and that only prudent and calculated risks should be taken. Participant 4 indicated that it is a culture and it is how they operate. Participant 2 said their institution is very sensitive to risk and that bank leaders knew the mortgage crisis was coming.

Table 3

*Frequency of Themes: Risk Culture in the Organization*

Theme	<i>n</i>
Management	75
Performance	21
Responsibility	17
Associates	17

Messaging about risk must come from the top down. A recent study by Berger, Kick, and Schaeck (2014) on executive board compensation in relation to bank risk taking in German banks uncovered two main findings. First, decreases in average board or executive manager age robustly increase the bank's risk appetite. Second, educational attainment (level of higher education) by the CEO was linked and associated with a decrease in risk taking. Three of the four CEOs interviewed for this study were in their 60s. All four executives held at least graduate-level degrees. There was a consistent theme around the level of importance of risk and how it is assessed in almost every customer interaction. Participant 3 indicated that at every executive-level board meeting, the first topic presented is always in regard to risk and risk exposure.

**Question 4: Risk exposure and management.** Interviewees were asked how their organization assesses risk exposure and what the cost and benefits are of managing risk. Participant 3 stated that there are plenty of costs for not managing risk effectively. Fines, reputational damage, and even bank closure may be applicable. The benefits of managing risk the right way can keep the doors open for a long time. Participant 2 stated

that the bank is very liquid, which helps the exposure of risk in many ways. Capital helps banks to increase their probability of survival and market share at all times—during banking crises, market crises, and normal times (Berger & Bouwman, 2013). Table 4 shows the interviewee’s themes related to importance of managing risk exposure and sustainable growth.

Table 4

*Frequency of Themes: Risk Exposure and Management*

Theme	<i>n</i>
Sustainability	14
Committee	12
Culture	11
Exposure	11

Participant 1 mentioned sustainable and responsible growth—the bank cannot sustain in the banking industry without proper risk protocols. Participant 4 indicated that although staff make very few exceptions with their lending guidelines, they are still willing to go outside the lending box, depending on the relationship the client has with the bank. Participant 4 also stated that all associates need to have the right judgment and similar goals in order for risk to be managed efficiently within the workplace.

**Question 5: Risk-management training.** Participants were asked what risk-management training was offered to employees, if any. Risk and compliance training is virtually mandated now by all regulators for all banks. Some banks go above the necessary trainings to ensure overall proficiency and acumen. Participant 1 indicated that

ERM training is conducted on a semiannual basis. Also, the type of risk-management training is dependent on the position the associate is in. Participant 2 revealed that risk presentations for all associates is the norm at the institution, whereas Participant 3 stated all associates are required to pass their compliance tests annually. Table 5 presents the major themes, suggesting that regulation plays a large role in risk training. Associate knowledge and understanding were consistent themes among the participants related to the firms' risk-management training.

Table 5

*Frequency of Themes: Risk-Management Training*

Theme	<i>n</i>
Regulators	18
Exposure	14
Knowledge/understanding	9
Incentive	8

**Question 6: Employee incentives and performance metrics.** Interviewees were asked what employee incentives and performance metrics were used to reinforce sound risk-management practices. Participant 3 described that the executive team incentive plan has components built into it that complement sound risk management. Associates down to the branch level have some form of risk-management rating that is built in their incentive dashboard. Conversely, Participant 1 stated that risk management is simply a culture and expectation, which is exemplified from the top down; no special incentive is allotted. Participant 2 elaborated that many times the incentive for the associates is the

opportunity to grow their business and expand the relationships with their current clients.

Table 6 presents themes from the interviews. Culture and the expectation of being risk averse were the most constituent themes among the participants.

Table 6

*Frequency of Themes:  
Employee Incentives*

Theme	<i>n</i>
Expectation	14
Culture	13

#### **Question 7: Specific policies and practices regarding subprime mortgage**

**lending.** Interviewees were asked what policies and practices regarding subprime mortgage lending their institution followed during 2000–2008, the height of the subprime mortgage era. Competition can push agents to make similar choices, as bankers did in taking excessive risks in the run-up to the financial crisis. Competition focuses on the strategic interdependence of actors and considerations of relative efficiency, rewarding some behaviors and punishing others (Nelson & Katzensein, 2014). Table 7 shows the most consistent theme of bank sustainability. Bank competition was a major factor when assessing what types of loans were offered by the organization.

Participant 1 stated that associates at the bank certainly felt the competitive pressure to offer this product to their clients. They indulged in a stated loan program but mitigated it with higher compensating factors such as higher FICO or lower loan-to-value

ratio. The participant continued to reiterate that the bank leaders understood the economic cycle and that long-term subprime products would not be sustainable for the firm.

Table 7

*Frequency of Themes: Policies  
on Subprime Mortgage Lending  
2000–2008*

Theme	<i>n</i>
Sustainability	32
Exposure	12
Competition	8
Stated loans	2

Participant 4 indicated that bank leaders at the organization have always looked at sustainable loan performance for at least 10 years out with their portfolio and quickly realized subprime was not a risk they were willing to take on. Participant 2 indicated the bank had no policy against subprime. However, associates would never entertain making a loan to someone who could not handle the payback of the loan; it was simply “not our DNA.” Participant 3 indicated that they provided lending activities if their customers fit the lending guidelines the institution had.

**Question 8: Steward of the institution.** Interviewees were asked to describe what it means to be a good steward of the institution. Until 2015, Bank of America, JP Morgan, Citi, Wells Fargo, and many other banks had paid over \$130 billion for claims that they intentionally misled investors or were guilty of financial mortgage wrongdoing

(Yang, 2015). Table 8 indicates that participants described stewardship as meaning overall success, performance, and responsibility.

Table 8

*Frequency of Themes: Stewardship*

Theme	<i>n</i>
Sustainability	18
Responsible	15
Performance	11
Success	4

Participant 3 explained that the leaders' core values correlate directly to being a steward of the organization. The participant reiterated that if the bank leader takes care of the bank's clients, associates, shareholders, stake holders, and community, then being a steward comes naturally. Stewardship theory seeks to understand the conditions under which agents are less likely to base their actions on self-interest, but rather take pleasure in serving collective goals or act as stewards to the interests of their principals (Schillemans, 2013). Participant 4 indicated for an associate to be a good steward, the associate must have the ability and self-conscious goal of doing the right thing. Participant 1 emphasized the importance of growing the institution, but growing in a sustainable and responsible manner. The participant continued that there will always be pressure to perform, but growth must make sense and be sustainable. Participant 2 denoted the need to manage the moving elements of risk through diligent management and oversight. The participant stated that the constituents of the bank will all be enriched

if the bank's customers are successful with the help of their lending efforts. The lending will help create jobs, lower crime, and better quality of life. The participant emphasized that the local economy really relies on the bank, and being a good steward is incumbent on delivering to local constituents in an effort to aid in their success.

These findings are contrary to the agency theory, which represents the extreme end of focusing on individual self-gains, positing that agents will pursue actions that benefit them, regardless of the consequences for principals (Hernandez, 2012). All four of the participants thought processes around being a good steward seemed to align with stewardship theory. Based on the responses, these executives did not waver in putting their self-interest success first, but instead took onus in the institution's responsible success.

**Question 9: Additional comments.** Interviewees were asked if they would like to add any additional information to help better explain the role risk management plays in their organization. The field of participants reiterated that risk management must be a top-down process and needs to part of the culture that has been created by senior leadership. Participant 4 stated that if all associates do not partake in the seriousness of risk-management efforts, then the culture is broken.

### **Applications to Professional Practice**

This research is meaningful to mortgage risk-mitigation strategies and leadership behaviors in several ways. The main purpose of the study was to explore risk-mitigation protocols conducted by bank leaders on their mortgage portfolios. Ellul and Yerramilli (2013) found that stronger risk-managing protocols with mortgage portfolios can curtail



risk exposures and losses for banks. The findings of this study are relative to stewardship theory and indicated that these four bank leaders are not only great stewards to their organizations but also have employed stewards with the same moral and responsibly-minded behaviors. Segal and Lehrer (2012) looked to examine if stewardship can be institutionalized as a center organizing principle, by showing performance and corruption consistent with primacy of intrinsic motivation. One of the major emergent themes uncovered from responses centered on risk mitigation being a culture imbedded within the organizational philosophy and foundational core values. Consistent risk training, internal risk audit guardrails, and continued daily reinforcement of the “why” behind the importance of risk mitigation are practices all four participants exemplified in one way or another within their organizations. The application of stringent risk protocols is important for bank leaders to adopt and execute on a consistent basis. Participants 3 and 4 indicated that continuous stress testing and added guardrails are entrenched within their loan portfolios. This is a practice that many bank leaders only adopted after tremendous losses occurred to their bank. An effective way to help minimize potential losses to a bank’s mortgage portfolio is to ensure consistent stress and loan shocking is imbedded as standard protocol.

Offering subprime mortgages during 2000–2008 was not only a norm but a competitive advantage (Dell’Ariccia et al., 2012). Participants 1 and 4 admitted they lost potential new business opportunity to their competitors that offered subprime mortgages. However, they stayed vigilant in their loan offerings, as they knew these types of loans were not sustainable or healthy for a loan portfolio in a downward economy. Banking

executives can apply factors found within the third and fifth main themes uncovered. These tactical processes may lead to stronger oversight and foster a risk-mitigation culture.

### **Implications for Social Change**

Banks and financial institutions play integral roles in the socioeconomics of a community. They help fund small businesses, provide more jobs in the community, create homeownership, and more. If a bank undergoes losses in its loan portfolio, which is usually one of the biggest indicators of the bank's strength, it can have a profound ripple effect for the entire ecosystem of the institutions, creating financial turbulence in the local community. The implications for positive social change include the potential to provide pertinent information to future homeowners seeking a mortgage. A potential borrower looking for the right mortgage may want to consider the organizational lending offering before making a decision (Lugo, 2014). The output of this research may provide useful data to mortgage lenders, bankers, and regulatory entities on the possible deception and dishonesty presented during the subprime mortgage-loan era, while also uncovering sustainable risk mitigation from the bank leaders interviewed in this study.

Positive social change may occur if educating and informing borrowers leads to fewer individuals defaulting on home loans or eventually foreclosing. Immergluck (2013) concluded that there is a high correlation between borrowers who had a subprime mortgage loan and the propensity of foreclosing. Foreclosing on a house can have profound social effects on homeowners and the community. Financial hardship, credit challenges, and embarrassment stemming from a foreclosure can lead to negative social

consequences for a homeowner. Fewer subprime mortgages should equate to less foreclosures and financial hardships, which are critical benefits to society.

### **Recommendations for Action**

Financial institution leaders may consider their strategies against those listed under the main themes uncovered in this study. Of particular interest may be the third and fifth themes, which are establishing an enterprise risk committee and ensuring guardrails within mortgage portfolios. If these strategies and protocols do not exist within a bank or financial institution, leaders should look to implement similar processes. The majority of banks competed in the subprime mortgage space during the early part of the 21st century. Those who participated in this risky product almost inevitably endured moderate to severe financial repercussions (Eichengreen, Mody, Nedeljkovic, & Sarno, 2012). Senior bank leaders should consider the risk culture (or lack thereof) that has been instilled within the organization. Based on the responses, creating a sense of accountability, ownership, and responsibility is an imperative aspect in mitigating mortgage risk.

Findings from this study are important to bank executives and risk and credit officers. The mitigation of risk, especially mortgage risk, is essential for the bank's profitability and sustainability. Moreover, all company stakeholders involved in the mitigation of mortgage portfolio risk may be interested in the findings of this study. Understanding the results of this study may be particularly beneficial to current bank leaders with authoritative decision making on mortgage offerings. I will disseminate the results of this study through conferences, scholarly journals, and business journals. Furthermore, since I am employed in the banking industry, I will be able to cascade the

results and best practices obtained from this research to my vast network of banking associates.

### **Recommendations for Further Research**

The findings from this study warrant additional exploration in mortgage risk mitigations due to the enormous financial losses to both the bank and the consumer that may result from a bad loan offering. The reduction of loan volume may be stronger as the riskiness of the loan portfolio increases (Pausch & Welzel, 2012). Therefore, researchers should conduct future studies to explore issues not covered in the study to address delimitations. I recommend the exploration into those banks that actually offered subprime mortgages and collapsed or endured huge financial ramifications during the U.S financial crisis.

One of the limitations expressed in the study was the willingness and time allotted by the participants for the interviews, since the participants are of executive stature within their respective organizations. A recommendation for future studies to help curtail this limitation is gaining the perspective from the mortgage loan officer or midlevel banking associate. This should aid in uncovering different viewpoints to include those of associates transacting directly with the consumer. Moreover, sufficient time and more comprehensive interviews may transpire, as these associates do not hold the same responsibilities and duties as their executives.

### **Reflections**

During the research process, my understanding of the doctoral research journey evolved. The detailed time consumption, energy, and focus certainly challenged me far

beyond my initial perception of this process. Alleviating my own personal biases on this topic was even a greater challenge. I not only worked in the subprime mortgage industry during this prolific lending era, but also fell victim as a consumer due to loose lending guidelines, as hundreds of thousands of homeowners across the nation did. The findings of the study resonated well with me as it created reflections of my experiences, both as an associate in the industry and as a consumer of homeownership. I was able to recognize many strategies that were not practiced during the time I was employed in the subprime mortgage industry (2004–2010). I was also able to determine strategies from the findings of this study that were implemented insufficiently by many financial institutions across the nation. What may be most concerning about this topic is that subprime mortgages are trending back in the financial industry. I can only hope that findings from this study, past mortgage industry turmoil, and mandated regulation will help aid bank leaders in their mortgage risk-management processes moving forward.

### **Summary and Study Conclusions**

A plethora of research has been studied on the subprime mortgage crisis since its devastating ramifications after 2007. Numerous explanations exist: misguided monetary policy, a global savings surplus, government policies encouraging homeownership, irrational consumer expectations or rising prices, inelastic housing supply, and inefficient bank risk protocols (Levitin & Wachter, 2012). This study specifically focused on practices in relation to mortgage portfolio risk-management efforts. The purpose of this qualitative multiple-case study was to explore risk-management strategies and policies of those bank leaders who effectively mitigated subprime mortgage loan defaults during the

financial crisis. The specific business problem for this study was that some banking leaders lack effective risk-management strategies and policies to help mitigate the risk of mortgage default. Therefore, the research question was: what risk-management strategies were employed by financial leaders of successful firms to mitigate subprime mortgage default? The findings indicated that senior bank leaders need specific and consistent strategies in place to minimize mortgage portfolio risk. Furthermore, the findings suggested that bank executives should create the risk culture from the top down, and that much of the onus falls on these leaders to instill the right culture and periodically inspect its efficiencies.

It is important to mention that the participants of the study answered questions using a semistructured interview protocol. In addition, company documents were reviewed, which included an employee handbook and annual reports, to add supplemental data. I triangulated data collected through semistructured interviews and company documents with current public literature to support the findings.

Senior bank leaders must exemplify stewardship and should employ associates who represent the same stewardship behaviors. As noted in the constructs of the stewardship theory, members are collectivists in the sense that they value cooperative behaviors more than behaviors driven by self-interest (Welsh, Memili, Rosplock, Roure, & Segurado, 2013). The primary responsibility of risk management is to understand the portfolio of risk that the bank is undertaking and the risks it plans to take in the future (Hull, 2012). Bank leaders who desire to be successful in their lending portfolios should consistently monitor associate engagement, risk culture, and risk protocols.

## References

- Abu Hussain, H., & Al-Ajmi, J. (2012). Risk management practices of conventional and Islamic banks in Bahrain. *Journal of Risk Finance*, 13, 215-239. doi:10.1108/15265941211229244
- Adjei, F. (2013). The effects of cash holdings on corporate performance during a credit crunch: Evidence from the sub-prime mortgage crisis. *Journal of Economics and Finance*, 37, 188-199. doi:10.1007/s12197-011-9177-8
- Aebi, V., Sabato, G., & Schmid, M. (2012). Risk management, corporate governance, and bank performance in the financial crisis. *Journal of Banking & Finance*, 36, 3213-3226. doi:10.2139/ssrn.1942896
- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2014). Predatory lending and the subprime crisis. *Journal of Financial Economics*, 113(1), 29-52. doi:10.3386/w19550
- Ai, J., Brockett, P. L., Cooper, W. W., & Golden, L. L. (2012). Enterprise risk management through strategic allocation of capital. *Journal of Risk and Insurance*, 79(1), 29-56. doi:10.1002/9781118673270
- An, X., Deng, Y., Rosenblatt, E., & Yao, V. W. (2012). Model stability and the subprime mortgage crisis. *Journal of Real Estate Finance and Economics*, 45, 545-568. doi:10.1007/s11146-010-9283
- Ashton, P. (2014). The evolving juridical space of harm/value: Remedial powers in the subprime mortgage crisis. *Journal of Economic Issues*, 48, 959-979. doi:10.2753/JEI0021-3624480405

- Berger, A. N., & Bouwman, C. H. (2013). How does capital affect bank performance during financial crises? *Journal of Financial Economics*, 109(1), 146-176. doi:10.2139/ssrn.1739089
- Berger, A. N., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking. *Journal of Corporate Finance*, 28, 48-65. doi:10.2139/ssrn.1987501
- Bhardwaj, G., & Sengupta, R. (2012). Subprime mortgage design. *Journal of Banking & Finance*, 36, 1503-1519. doi:10.1016/j.jbankfin.2011.12.012
- Brakewood, B., & Poldrack, R. A. (2013). The ethics of secondary data analysis: Considering the application of Belmont principles to the sharing of neuroimaging data. *Neuroimage*, 82, 671-676. doi:10.1016/neuroimage.2013.02.040
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Thousand Oaks, CA: Sage.
- Buschman, C. (2014). *A total cost matrix analysis and the impact of international supplier management* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 1617454817)
- Bushman, R. M., & Williams, C. D. (2012). Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking. *Journal of Accounting and Economics*, 54(1), 1-18. doi:10.2139/ssrn.1521584
- Caldwell, C., & Karri, R. (2005). Organizational governance and ethical systems: A covenantal approach to building trust. *Journal of Business Ethics*, 58, 249-259. doi:10.1007/s10551-005-1419-2



- Campbell, J. Y., & Cocco, J. F. (2015). A model of mortgage default. *Journal of Finance*, 70, 1540-6261. doi:10.1111/jofi.12252
- Casey, C., Glasberg, D. S., & Beeman, A. (2011). Racial disparities in access to mortgage credit: Does governance matter? *Social Science Quarterly*, 92, 782-806. doi:10.1111/j.15406237.2011.00792.x
- Cetorelli, N., & Goldberg, L. S. (2012). Liquidity management of US global banks: Internal capital markets in the great recession. *Journal of International Economics*, 88, 299-311. doi:10.1016/j.jinteco.2012.05.001
- Chang, G., & Chen, F. (2013). CEO behavior and the subprime mortgage crisis. *International Journal of Business and Finance Research*, 7, 13-25. doi:10.2139/ssrn.1772769
- Christie, L. (2013, February 14). Foreclosure filings fall to lowest level since 2007. *CNN Money*. Retrieved from [http://money.cnn.com/2013/02/14/real\\_estate/foreclosures/index.html](http://money.cnn.com/2013/02/14/real_estate/foreclosures/index.html)
- Consumer Financial Protection Bureau. (2014). Home page. Retrieved from <http://www.consumerfinance.gov/>
- Coppedge, K. (2011). Illusive victimization of a homeowner in mortgage foreclosure. *Journal of Science and Business Review*, 6, 149-156. doi:10.1108/17465681111143966
- Da Mota Pedrosa, A., Näslund, D., & Jasmand, C. (2012). Logistics case study based research: Towards higher quality. *International Journal of Physical Distribution & Logistics Management*, 42, 275-295. doi:10.1108/09600031211225963

- Dahl, D. (2010). Does flexibility hinder financial regulation? The case of CRA enforcement in the USA. *Journal of Financial Regulation and Compliance*, 18, 193-200. doi:10.1108/13581981011060781
- Dell'Ariccia, G., Igan, D., & Laeven, L. U. (2012). Credit booms and lending standards: Evidence from the subprime mortgage market. *Journal of Money, Credit and Banking*, 44, 367-384. doi:10.2139/ssrn.1100138
- DeLoughy, S. T. (2012). Risk versus demographics in subprime mortgage lending: Evidence from three Connecticut cities. *Journal of Real Estate Finance and Economics*, 45, 569-587. doi:10.1007/s1114601092810
- Dieckmann, S., & Plank, T. (2012). Default risk of advanced economies: An empirical analysis of credit default swaps during the financial crisis. *Review of Finance*, 16, 903-934. doi:10.1093/rof/rfr015
- Ding, L., Quercia, R. G., Reid, C. K., & White, A. M. (2012). The impact of federal preemption of state antipredatory lending laws on the foreclosure crisis. *Journal of Policy Analysis and Management*, 31, 367-387. doi:10.1002/pam.21604
- Docking, D. (2012). The 2008 financial crises and implications of the Dodd-Frank Act. *Journal of Corporate Treasury Management*, 4, 353-363. Retrieved from <http://henrystewart.metapress.com/link.asp?id=qu28305845016105>
- Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behavior*, 41, 1319-1320. doi:10.1007/s105080120016-6

- Dymski, G., Hernandez, J., & Mohanty, L. (2013). Race, gender, power, and the US subprime mortgage and foreclosure crisis: A meso analysis. *Feminist Economics*, 19, 124-151. doi:10.1080/13545701
- Eichengreen, B., Mody, A., Nedeljkovic, M., & Sarno, L. (2012). How the subprime crisis went global: Evidence from bank credit default swap spreads. *Journal of International Money and Finance*, 31, 1299-1318. doi:10.1016/j.jimonfin.2012.02.002
- Ellul, A., & Yerramilli, V. (2013). Stronger risk controls, lower risk: Evidence from US bank holding companies. *The Journal of Finance*, 68, 1757-1803. doi:10.1111/jofi.12057
- Faber, J. W. (2013). Racial dynamics of subprime mortgage lending at the peak. *Housing Policy Debate*, 23, 328-349. doi:10.1080/10511482.2013.771788
- Fannie Mae. (2013). *Mortgage fraud overview*. Retrieved from <https://www.fanniemae.com>
- Fielding, N. G. (2012). Triangulation and mixed methods designs: Data integration with new research technologies. *Journal of Mixed Methods Research*, 6, 124-136. doi:10.1177/1558689812437101
- Fowler, F. J., Jr. (2013). *Survey research methods*. Thousand Oaks, CA: Sage.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13(1). doi:10.1186/1471-2288-13-117

- Gavalas, D., & Syriopoulos, T. (2014). Bank credit risk management and migration analysis: Conditioning transition matrices on the stage of the business cycle. *International Advances in Economic Research*, 20(2), 151-166. doi:10.1007/s11294-014-9459
- Goetzmann, W. N., Peng, L., & Yen, J. (2012). The subprime crisis and house price appreciation. *Journal of Real Estate Finance and Economics*, 44, 36-66. doi:10.1007/s11146-011-9321-4
- Graff, M. (2013). The quantity theory of money in Year Six after the subprime mortgage crisis. In D. Maltritz & M. Berlemann (Eds.), *Financial crises, sovereign risk and the role of institutions* (pp. 169-195). Dordrecht, The Netherlands: Springer International. doi:10.5176/2251-2012\_qqe14.02
- Greene, D. N., Schmidt, R. L., Kamer, S. M., Grenache, D. G., Hoke, C., & Lorey, T. S. (2013). Limitations in qualitative point of care hCG tests for detecting early pregnancy. *Clinica Chimica Acta*, 415, 317-321. doi:10.1016/j.cca.2012.10.105
- Guangdi, C., & Fulwood, C. (2013). CEO behavior and subprime mortgage crisis. *International Journal of Business and Finance Research*, 7, 13-25. Retrieved from <http://www.theibfr.com>
- Guiso, L., Sapienza, P., & Zingales, L. (2013). The determinants of attitudes toward strategic default on mortgages. *Journal of Finance*, 68, 1473-1515. doi:10.1111/jofi.12044
- Haneef, S., Riaz, T., Ramzan, M., Rana, M. A., Ishaq, H. M., & Karim, Y. (2012). Impact of risk management on non-performing loans and profitability of banking sector

- of Pakistan. *International Journal of Business and Social Science*, 3, 308-315.  
Retrieved from [http://ijbssnet.com/journals/Vol\\_3\\_No\\_7\\_April\\_2012/34.pdf](http://ijbssnet.com/journals/Vol_3_No_7_April_2012/34.pdf)
- Hernandez, M. (2012). Toward an understanding of the psychology of stewardship. *Academy of Management Review*, 37, 172-193. doi:10.5465/amr.2010.0363
- Hiebl, M. R. (2012). Peculiarities of financial management in family firms. *International Business & Economics Research Journal*, 11, 315-322. doi:10.1108/mrr-11-2013-0254
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher*, 20(4), 12-17. doi:10.7748/nr2013.03.20.4.12.e326
- Hull, J. (2012). *Risk management and financial Institutions + web site* (3rd ed.). New York, NY: John Wiley & Sons.
- Immergluck, D. (2011). From risk limited to risk loving mortgage markets: Origins of the U.S. subprime crisis and prospects for reform. *Journal of Housing and the Built Environment*, 26, 245-262. doi:10.1007/s109010119224y
- Immergluck, D. (2013). Too little, too late, and too timid: The federal response to the foreclosure crisis at the five-year mark. *Housing Policy Debate*, 23(1), 199-232. doi:10.2139/ssrn.1930686
- Irvine, A., Drew, P., & Sainsbury, R. (2013). Am I not answering your questions properly? Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. *Qualitative Research*, 13(1), 87-106. doi:10.1177/0081175012465967

- Kalinic, I., & Forza, C. (2012). Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review*, 21, 694-707. doi:10.1016/j.ibusrev.2011.08.002
- Kanhai, C., & Ganesh, L. (2014). Factors influencing the adoption of enterprise risk management (ERM) practices by banks in Zimbabwe. *International Journal of Business & Commerce*, 3(6), 1-17. Retrieved from <http://www.ijbcnet.com/3-6/IJBC-13-3304.pdf>
- Kapan, T., & Minoiu, C. (2014). Liquidity shocks and the supply of credit after the 2007–2008 crisis. *International Journal of Finance & Economics*, 19(1), 12-23. doi:10.1002/ijfe.1477
- Karikari, J., Voicu, I., & Fang, I. (2011). FHA vs. subprime mortgage originations: Is FHA the answer to subprime lending? *Journal of Real Estate Finance and Economics*, 43, 441-458. doi:10.1007/s1114600992187
- Kau, J. B., Keenan, D. C., Lyubimov, C., & Slawson, V. C. (2012). Asymmetric information in the subprime mortgage market. *Journal of Real Estate Finance and Economics*, 44(1-2), 67-89. doi:10.1007/s11146-010-9288-6
- Keys, B. J., Seru, A., & Vig, V. (2012). Lender screening and the role of securitization: Evidence from prime and subprime mortgage markets. *Review of Financial Studies*, 25, 2071-2108. doi:10.1093/rfs/hhs059
- Kroszner, R. S., & Strahan, P. E. (2013). Regulation and deregulation of the U.S. banking industry: Causes, consequences and implications for the future. In N. Rose (Ed.),

*Economic regulation and its reform: What have we learned?* (pp. 485-543).

Chicago, IL: University of Chicago Press.

- Levine, R. (2012). The governance of financial regulation: Reform lessons from the recent crisis. *International Review of Finance*, 12(1), 39-56. doi:10.1111/j.1468-2443.2011.01133.x
- Levitin, A. J., & Wachter, S. M. (2012). Explaining the housing bubble. *Georgetown Law Journal*, 100, 1177-1258. doi:10.2139/ssrn.1669401
- Lewellyn, K., & Muller-Kahle, M. (2012). CEO power and risk taking: Evidence from the subprime lending industry. *Corporate Governance: International Review*, 20, 289-307. doi:10.1111/j.1467-8683.2011.00903.x
- Liu, M., Ma, T., & Zhang, Y. (2012). Are short sellers informed? Evidence from the 2007–2008 subprime mortgage crisis. *Financial Review*, 47(1), 199-218. doi:10.1111/j.1540-6288.2011.00326.x
- Louzis, D. P., Vouldis, A. T., & Metaxas, V. L. (2012). Macroeconomic and bank-specific determinants of non-performing loans in Greece: A comparative study of mortgage, business and consumer loan portfolios. *Journal of Banking & Finance*, 36, 1012-1027. doi:10.1016/j.jbankfin.2011.10.012
- Lugo, S. (2014). Discretionary ratings and the pricing of subprime mortgage-backed securities. *Journal of Banking & Finance*, 48, 248-260. doi:10.1016/j.jbankfin.2014.06.021

- MacKenzie, D. (2012). Knowledge production in financial markets: Credit default swaps, the ABX and the subprime crisis. *Economy and Society*, 41, 335-359. doi:10.1080/03085147.2012.661635
- Mang'anyi, E. E. (2011). Ownership structure and corporate governance and its effects on performance: A case of selected banks in Kenya. *International Journal of Business Administration*, 2(3). doi:10.5430/ijba.v2n3p2
- Marshall, C., & Rossman, G. (2011). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Matthews, K. (2013). Risk management and managerial efficiency in Chinese banks: A network DEA framework. *Omega*, 41, 207-215. doi:10.2139/ssrn.1797468
- Mayer, D., Cava, A., & Baird, C. (2014). Crime and punishment (or the lack thereof) for financial fraud in the subprime mortgage meltdown: Reasons and remedies for legal and ethical lapses. *American Business Law Journal*, 51, 515-597. doi:10.01111/ablj.12033
- Merriam, S. B. (2014). *Qualitative research: A guide to design and implementation*. New York, NY: John Wiley & Sons.
- Mian, A., Sufi, A., & Trebbi, F. (2010). *The political economy of the subprime mortgage credit expansion* (Working Paper No. 1021). Chicago, IL: The University of Chicago, Booth School of Business. doi:10.2139/ssrn.1623004
- Miller, T., Birch, M., Mauthner, M., & Jessop, J. (Eds.). (2012). *Ethics in qualitative research*. Thousand Oaks, CA: Sage.
- Moustakas, C. (1994). *Phenomenological research methods*. Los Angeles, CA: Sage.



- Myers, M. D. (2013). *Qualitative research in business and management*. Thousand Oaks, CA: Sage.
- Nelson, S. C., & Katzenstein, P. J. (2014). Uncertainty, risk, and the financial crisis of 2008. *International Organization*, 68, 361-392. doi:10.1917/s00208183130000416
- Nguyen, T. H., & Pontell, H. N. (2010). Mortgage origination fraud and the global economic crisis. *Criminology & Public Policy*, 9, 591-612. doi:10.1111/j.17459133.2010.00653.x
- Nieh, C. C., Yang, C. H., & Kao, Y. S. (2012). Who has more influence on Asian stock markets around the subprime mortgage crisis—The US or China? *Applied Economics Letters*, 19, 329-335. doi:10.1080/1350851.2011.577001
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42, 533-544. doi:10.1007/s10488-013-0528-y
- Palmer, T. (2015). *Borrower experiences with subprime mortgage loans in Gwinnett County, Georgia*. Unpublished doctoral dissertation, Walden University, Minneapolis, MN.
- Patterson, L. A., & Koller, C. A. (2011). Diffusion of fraud through subprime lending: The perfect storm. *Economic Crisis and Crime (Sociology of Crime Law and Deviance)*, 16, 25-45. doi:10.1108/S1521-6136(2011)0000016005

- Paul, S. (2012). Detecting and explaining systemic risks of mortgage banks—Evidence from the subprime crisis. *Zeitschrift für Betriebswirtschaft*, 82(1), 109-132. doi:10.1007/978-3-8349-38
- Paul, S., Stein, S., & Uhde, A. (2012). Measuring the quality of banking supervision revisited: Assessments by German banks before and during the financial crisis. *Journal of Governance and Regulation*, 1(3), 96-109. doi:10.2139/ssrn.1946120
- Paulet, E., Parnaudeau, M., & Relano, F. (2014). Banking with ethics: Strategic moves and structural changes of the banking industry in the aftermath of the subprime mortgage crisis. *Journal of Business Ethics*, 131, 1-9. doi:10.1007/s10551-014-2274-9
- Pausch, T., & Welzel, P. (2012). *Regulation, credit risk transfer with CDS, and bank lending* (Discussion Paper No. 05/2012). Frankfurt, Germany: Deutsche Bundesbank. Retrieved from <http://hdl.handle.net/10419/56022>
- Perkins, K., Columna, L., Lieberman, L., & Bailey, J. (2013). Parents' perceptions of physical activity for their children with visual impairments. *Journal of Visual Impairment & Blindness*, 107(2), 131-142. doi:10.1177/0264619615599813
- Perryman, A. F., Jr. (2012). *The effects of the subprime mortgage crisis on African Americans in the United States (Detroit Michigan Metropolitan Statistical Division)*. Unpublished doctoral dissertation, Lawrence Technological University, Southfield, MI.

- Petersen, M. A., De Waal, B., Mukuddem-Petersen, J., & Mulaudzi, M. P. (2014). Subprime mortgage funding and liquidity risk. *Quantitative Finance*, 14, 545-555. doi:10.1080/14697688.2011.637076
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual Therapy*, 17, 378-384. doi:10.1016/j.math.2012.03.004
- Pezzuto, I. (2012). Miraculous financial engineering or toxic finance? The genesis of the US subprime mortgage loans crisis and its consequences on the global financial markets and real economy. *Journal of Governance and Regulation*, 1(3). doi:10.2139/ssrn.1332784
- Phillips, S. (2012). The subprime mortgage calamity and the African American woman. *The Review of Black Political Economy*, 39, 227-237. doi:10.1007/s12114-011-9107-1
- Pike, B., & Chui, M. L. (2012). An evaluation of the FASB's conceptual framework from a user's perspective. *Academy of Accounting & Financial Studies Journal*, 16, 77-94. Retrieved from <http://www.alliedacademies.org>
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. Thousand Oaks, CA: Sage.
- Realtytrac. (2013). Home page. Retrieved from <http://www.realtytrac.com/>
- Roslan, A., & Dahan, H. M. (2013). Mediating effect of enterprise risk management practices on risk culture and organizational performance. In *The International Conference on Social Science Research (ICSSR 2013)*, Penang, Malaysia.

- San Jose, L., Retolaza, J. L., & Gutierrez-Goiria, J. (2011). Are ethical banks different? A comparative analysis using the Radical Affinity Index. *Journal of Business Ethics*, 100, 151-173. doi:10.1007/s1055101107744
- Schillemans, T. (2013). Moving beyond the clash of interests: On stewardship theory and the relationships between central government departments and public agencies. *Public Management Review*, 15, 541-562. doi:10.1080/14719037.2012691008
- Segal, L., & Lehrer, M. (2012). The institutionalization of stewardship: Theory, propositions, and insights from change in the Edmonton public schools. *Organization Studies*, 33(2), 169-201. doi:10.1177/0170840611433994
- Seide, C. K. (2012). Consumer financial protection post Dodd-Frank: Solutions to protect consumers against wrongful foreclosure practices and predatory subprime auto lending. *University of Puerto Rico Business Law Journal*, 3, 219-251. Retrieved from <http://uprblj.org/issues/volume%203%20issue%202/articles/3.2-UPRBLJ-219-Chris-Seide-DoddFrank-06-01-2012.pdf>
- Shiller, R. J. (2012). *The subprime solution: How today's global financial crisis happened, and what to do about it*. Princeton, NJ: Princeton University Press.
- Singh, G., & Bruning, K. (2011). The mortgage crisis: Its impact and banking restructure. *Academy of Banking Studies Journal*, 10, 23-43. Retrieved from <http://www.alliedacademies.org>
- Somasundaram, D., & Sivayokan, S. (2013). Rebuilding community resilience in a post-war context: Developing insight and recommendations—A qualitative study in

- Northern Sri Lanka. *International Journal of Mental Health Systems*, 7(1), 1-25.  
doi:10.1186/1752-4458-7-3
- Street, C. T., & Ward, K. W. (2012). Improving validity and reliability in longitudinal case study timelines. *European Journal of Information Systems*, 21, 160-175.  
<http://dx.doi.org/10.1057/ejis.2011.53>
- Thomas, S. J. (2015). *Exploring strategies for retaining information technology professionals* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3681815)
- Thomson, B. S. (2011). Qualitative research: validity. *Journal of Administration & Governance*, 6, 77-82. Retrieved from [http://joaag.com/uploads/6\\_1\\_-7\\_Research\\_Method\\_Thomson.pdf](http://joaag.com/uploads/6_1_-7_Research_Method_Thomson.pdf)
- Trier-Bieniek, A. (2012). Framing the telephone interview as a participant-centered tool for qualitative research: A methodological discussion. *Qualitative Research*, 12, 630-644. doi:10.1177/1468794112439005.
- Tsay, M., & Brady, M. (2012). A case study of cooperative learning and communication pedagogy: Does working in teams make a difference? *Journal of the Scholarship of Teaching and Learning*, 10(2), 78-89. doi:10.1177/15257401060270030401
- U.S. Department of Housing and Urban Development. (2012). *Owning a home*. Retrieved from <http://portal.hud.gov/hudportal/HUD>
- Van Puyvelde, S., Caers, R., Du Bois, C., & Jegers, M. (2012). The governance of nonprofit organizations integrating agency theory with stakeholder and

stewardship theories. *Nonprofit and Voluntary Sector Quarterly*, 41, 431-451.

doi:10.1177/0899764011409757

Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative–quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 37(1), 21-54. Retrieved from <http://dl.acm.org/citation.cfm?id=2481693>

Vinokurova, N. (2012). *The 2008 mortgage crisis as a failure of analogical reasoning*. Unpublished doctoral dissertation, New York University, New York, NY.

Voicu, I., Jacob, M., Rengart, K., & Fang, I. (2012). Subprime loan default resolutions: Do they vary across mortgage products and borrower demographic groups? *Journal of Real Estate Finance and Economics*, 45, 939-964. doi:10.1007/s11146-011-9305-4

Walker, J. L. (2012). Research column: The use of saturation in qualitative research. *Canadian Journal of Cardiovascular Nursing*, 22(2), 37-41. Retrieved from <http://www.cccn.ca/content.php?doc=21>

Wang, P., & Moore, T. (2012). The integration of the credit default swap markets during the US subprime crisis: Dynamic correlation analysis. *Journal of International Financial Markets, Institutions and Money*, 22(1), 1-15. doi:10.1016/j.intfin.2011.07.001

Weber, O. (2012). Environmental credit risk management in banks and financial service institutions. *Business Strategy and the Environment*, 21, 248-263. doi:10.1002/bse.737

- Welsh, D. H., Memili, E., Rosplock, K., Roure, J., & Segurado, J. L. (2013). Perceptions of entrepreneurship across generations in family offices: A stewardship theory perspective. *Journal of Family Business Strategy*, 4, 213-226. doi:10.1016/j.jfbs.2013.07.003
- Wood, D. M., & Dargan, P. I. (2012). Understanding how data triangulation identifies acute toxicity of novel psychoactive drugs. *Journal of Medical Toxicology*, 8, 300-303. doi:10.1007/s13181-0120241-3
- Wynn, D., Jr., & Williams, C. K. (2012). Principles for conducting critical realist case study research in information systems. *MIS Quarterly*, 36, 787-810. Retrieved from <http://misq.org/principles-for-conducting-critical-realist-case-study-research-in-information-systems.html?SID=0ceceerh1bg9qoghfra9obtkh6>
- Yang, E. (2015). *The secret bank settlement: Who was guilty and who was not?* Unpublished doctoral dissertation, State University of New York, Stony Brook.
- Yin, J., & Zhang, Y. (2012). Institutional dynamics and corporate social responsibility (CSR) in an emerging country context: Evidence from China. *Journal of Business Ethics*, 111, 301-316. doi:10.1007/s1055101212434
- Yin, R. K. (2012). *Applications of case study research* (3rd ed.). Thousand Oaks, CA: Sage.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.

## Appendix: Certificate of Completion

### **Certificate of Completion**

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Sam Barouki** successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 05/10/2012

Certification Number: 918646